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ABSTRACT

The purpose of the second evaluation of the Polyvalent Adult Education Center in Bombay, which was established in 1967, was to provide program feedback for India and other developing countries. Following an introduction, part 2 describes the Center program, part 3 consists of a program analysis, and part 4 contains a summary and recommendations. The program analysis contains comments on the Center's clientele and needs; program preparation (identification of target groups, participant selection, resource personnel, and involvement of employing agencies); and program implementation (successful and less successful courses, curriculum methodology, learning materials, audiovisual aids, library, supervision, course evaluation, and participant/employer/trade union reactions). Workers have benefited from their training in personal fulfillment and career mobility, and the Center has been able to establish rapport and empathy with workers, voluntary agencies, and resource persons. However, the organization and success of courses has varied, and there have been periodic spells of stagnation affecting the growth of the Center. Much future effort needs to be directed to course planning and formulation to adopt a truly innovative and interdisciplinary approach. Part 4 presents 26 recommendations and 10 prospects for the future. Course details and case studies of selected courses are appended. (EA)

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POLYVALENT ADULT EDUCATION CENTRE

(Shramik Vidyapeeth) BOMBAY

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DIRECTORATE OF NONFORMAL (ADULT) EDUCATION
Ministry of Education & Social Welfare
Government of India, New Delhi
1974

SECOND EVALUATION STUDY

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POLYVALENT ADULT EDUCATION CENTRE

(Shramik Vidyapeeth)

BOMBAY

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DirectOrate of Nonformal (Adult) Education
Ministry of Education & Social Welfare
Government of India
1974

We would like to place on record our gratitude to the many individuals and organisations but for whose cooperation, this evaluation study would not have been possible in such a short time—particularly to Dr. P.K. Muttagi, who assisted by Mr. V.K. Kagalkar, worked under the guidance of Dr. M S. Gore—Director, Tata Institute of Social Sciences, Bombay. While other individual acknowledgements would not be practicable in this limited space, we would like to make special mention of the cooperation and help extended by the Bombay City Social Education Committee, the staff of the Shramik Vidyapeeth the employers of the various industrial organisations who spared the time for interviews and discussions, and the resource persons and individual workers who helped in their frank assessments and opinions in the course of this study.

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Part I

INTRODUCTION

PURPOSE OF THE EVALUATION

The first study

The Polyvalent Centre (Shramik Vidyapeeth) was set up in Bombay 1967 under the Bombay City Social Education Commitee, as an experiment in organising polyvalent programmes for industrial workers in a highly urbanised centre. The project is sponsored by the Ministry of Education and financed by it. In the initial stages, UNESCO also extended technical and material support to the programme.

The initial experience was encouraging and generated wide interest in the programme not only in India but in other countries also. An evaluation study sponsored by UNESCO was taken up one year after the Centre started. The study was carried out by the Tata Institute of Social Sciences. Bombay, and it showed that the Centre has achieved moderate success and held considerable potential for further development. The study also provided guidelines for the improvement and strengthening of the programme.

A couple of years later, in order that countries in the region may share the experience gained in the Indian experiment, UNESCO sponsored an Asian Regional Seminar which was held in Bombay in 1971. It is a measure of the impression created by this experiment on the participants that the seminar recommended the adoption of the polyvalent adult education concept in other developing countries.

Since then the project has gained more experience and established itself as a recognised and accepted programme among the employers and employees of the Bombay industrial community. Even its modest measure of achievement has been adequate to convince administrators and planners of its validity. Proof of this lies in the fact that the Fifth Five-Year Plan in education has provided for an extension of this programme to other urban centres in the country. There is also a noticeable trend to incorporate the polyvalent concept and approach to other adult and continuing educational programmes for urben workers.

UNESCO has also recently shown interest in examining the results of this experiment for making them known to other developing countries, interested in taking up similar programmes.

The present study

A second evaluation study was, therefore, considered worthwhile and timely, to sum up the experience gained so far and to make available data (a) for feed-back into the programme, (b) for incorporating in extended programmes within India, and (c) for modifications and adaptations in other developing countries. UNESCO extended financial assistance towards the project, especially for the purpose of collecting and analysing the data.

The Directorate of Adult Education, Ministry of Education and Social Welfare thereupon took up this evaluation study, as a quick assessment, with the assistance of the Tata Institute of Social Sciences, Bombay. This evaluation study is based on the data collected by the Institute as well as on information and materials collected and examined by the officers of the Ministry of Education and the Directorate of Adult Education. The final responsibility for the interpretation and analysis of the evaluation data rests with the Directorate of Adult Education, Ministry of Education and Social Welfare.

METHODOLOGY OF THE STUDY

Emphasis

The purpose of this study being the evaluation of the programmes of the Centre with reference to its concept and objectives special reference has to be laid on the following aspects:

(a) To what extent has the concept of 'polyvalent adult education' been understood and realised ?

(b) Have the programmes matched the needs of the workers' community ?

(c) How have the pragrammes been conceived, organised and operated ?

(d) What has been the nature and extent of community support ? How can it be enhanced ?

(e) What has been the impact of the programme on the workers and employers who have directly participated, and how far has it been felt in the larger community of employers and workers ?

(f) What are the programme's strengths and weaknesses and what can be done to enhance its effectiveness ?

(g) What lessons can be drawn from extension of the concept in India as well as elsewhere ?

Sources

The plan of study sought to use various sources and methods for data collection which would throw light on different aspects of the Centre's organisation, activities and impact. Broadly speaking, the sources may be listed as follows:

- Reports and records;
- Proceedings and minutes of meetings held by various academic and administrative committees of the Centre;
- Visits to industries where courses were conducted, and discussions with participants (fifteen such group discussions were held in which 115 workers participated);
- Interviews with policy makers, particularly with the President and the members of the managing body of the Centre, the staff of the Centre, local social workers, labour leaders and educationists;
- questionnaires mailed to employers to ascertain their views on the programme; and
- detailed study of a few selected courses.

Part II

DESCRIPTION

THE ESTABLISHMENT OF THE POLYVALENT CENTRE

Genesis

Some novel and innovative experiments have highlighted the Indian adult education scene in recent years, and have symbolized the growing awareness of the need for continuing, lifelong and recurrent education for a developing society. One area of such exploratory effort is related to the educational and professional growth of the workes (and where possible his family) employed in various sectors in urban and semi-urban areas. Two ventures deserve mention: one, the workers social education programme being tried out for workers in semi-urban centres; and the other, a multi-faceted need-oriented programme for workers in highly urban industrialised centres. This study deals with only the latter programme.

The educational and professional needs of urban workers constitute in themselves a specialised area of continuing education, demanding its own strategies, institutional arrangements and techniques.

In the Indian context the number of urban workers —being still proportiouately limited—is, nevertheless, growing fast, fed from the urban areas as well as from the surrounding and even distant rural areas. For most of them, securing jobs and working in the industrial enterprises, transport, building activities, trades, services etc., represents a radical change in their life.

The 'profile' of these workers covers a large range of traits; their educational background varies from illiterate to semi-literate and a fair educational standard; their professional competence from unskilled to highly skilled on-the-job self-made specialisation, their psychological attitudes from maladjusted rural-urban transitioners to habitual and seasoned urbanisers; etc.

The first concern is obviously the rank and file of middle and lower level workers as distinguished from the better educated and better skilled workers who are capable of propelling themselves forward on their own initiative, or for whose needs the official agencies and employers have shown more concern. Most of the middle and lower level workers have entered their work situations either by circumstance or out of hard necessity, and their own individual choice has played very little role in it. Having drifted into the world of work with little preparation

and no knowledge of where it leads, most of them either stagnate, drop out, or lead a life of frustrated negative existence. This has two detrimental effects: one, on the employment itself to which the workers are not able to contribute, and the other on the individual, who fails to reach his full stature as a member of the labour force, as a citizen in a community, and as a member of a family. This in turn affects not only his own welfare and happiness, but the happiness and development of his family.

Unfortunately, except in a few isolated instances, there has been little consciousness on the part of employers (both public and private) of their obligations to the large shifts of the working force to help them in professional and educational growth. In a shortsighted pursuit of production, and immediate profit, the long-term interest of the workers, the development of the industry, and ultimately of the nation's economic development and productivity, are not sufficiently perceived.

The idea of polyvalent education centres has its genesis in these recognised but neglected needs of the workers for a multi-sided programme of educational, professional and cultural development.

The concept

There have been some efforts in recent years to make workers aware of themselves as members of a labour force which has its own duties and privileges. The programme of workers education implemented by the Central Board of Workers Education is the biggest example of this kind on a national scale.

There have also been some other efforts directed to particular fragmentary needs: literacy courses for illiterate and mostly unskilled workers, on-the-job training for some categories of untrained workers who urgently needed it; courses on labour safety, etc.

But all these efforts are, by and large, partial, and do not fully embrace the worker as a total personality. Even the trade unions are not able to perceive the role of education in the light of long term welfare and prosperity requirments of their members.

Thus, the basic idea governing polyvalent education is to meet various, interrelated needs of the worker with specifically matched programmes. It became gradually obvious that educational and training programmes geared to particular workers' needs (unisided programmes) are neglecting some important aspects of workers' life and labour's world. Simultaneity of efforts—combining professional

training with civic sense, elementary knowledge with social responsibility, vocational initiation with literacy, family life education with understanding of basic ethical values, promotion of labour ethics with cultural development etc.— was revealed to be necessary. At the same time it became evident that the educational and training programmes could not be uniform, or centrally administered but had to be locally 'coloured' and environmentally based. Since the vocational and educational equipment of each worker is widely variable it is obvious that the programme will also have to be diversified, flexible and adaptable to meet these specific needs. In other words, the 'mix' of the programme offered to workers consisting of educational, vocational civic, cultural and other components should be determined by the 'mix' of the specific educational, vocational and other needs of the workers.

To express it in another way, the **polyvalent needs** of the workers are to be met by the **polyvalent content** of the programme. These were the arguments which led to the decision to establish **centres for polyvalent education of urban workers.**

Objectives

The first Polyvalent Centre in India was set up in Bombay by the Ministry of Education, Government of India, in 1967 with the following objectives :

- To enrich the lives of workers through knowledge and better understanding of their environment;
- To prepare them more adequately for vocational and technical training through general education;
- To improve the vocational skill and technical knowledge of the workers for raising their efficiency and increasing their productive ability; and
- To develop the right perspective in them towards work.

THE ENVIRONMENT

Location : Choices

A programme can thus become truly polyvalent only when it is diversified, when it serves a differentiated client group in a complex environment.

This means that, at least in the first instance, such a programme should be organised primarily where there is a large employable sector. A highly industrialised urban centre offers the most favourable situations for organising these programmes, especially for the following reasons :

(1) The need for such polyvalent education is more conspicuous and socially better recognised;

(2) Material resources invested in the education of workers in these areas are likely to yield quicker results.

(3) The growing requirements of the 'labour force' are more evident, and the possibilities for using the acquired knowledge are more prominent ;

(4) Motivation of workers to participate in continuing education is higher; and

(5) Facilities for other inputs, such as teaching staff, accommodation, equipment and expertise are more favourable.

In the long run, such programmes will have to be extended to other areas which are in various stages of urbanisation and industrial and economic development.

Bombay had (according to the 1971 Census figures) a population of almost six million. The number of factories have grown from 1,500 in 1947 at the time of Independence to over 10,000 to date. The number of workers was 360,000 in 1947 and is now over one million. There is a wide range of small and large-scale industries in the city, some with a very large body of workers. The industries cover many kinds of production, ranging all the way from a simple artisan type to a highly mechanised variety.

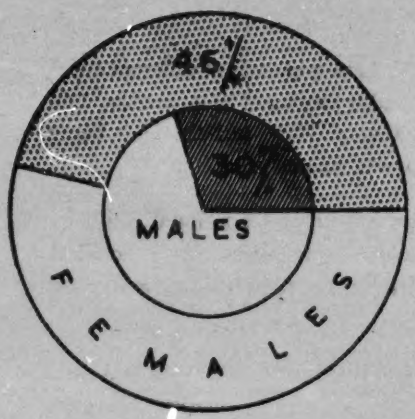
As the most important industrial and commercial centre, Bombay offers every year a great number of new employment. For many of them there are properly trained youth but several jobs need specific training and preparation, which can only be done in the course of employment.

The working conditions cover a wide range of differences. New patterns of promotion opportunities (vertical mobility), new equipment and machineries, modernised management, additional facilities for health services and housing, and so on are placing complementary demands on workers. On the other side the economic difficulties, constraints and stringencies, as well as price rise, inflation and scarcity can be alleviated through higher productivity, lower costs of production, reduced wastage, higher emoluments, better dispensation of justice and more equitable distribution of wealth. The Bombay environment represents a large variety of economic situations, social circumstances and human requirements.

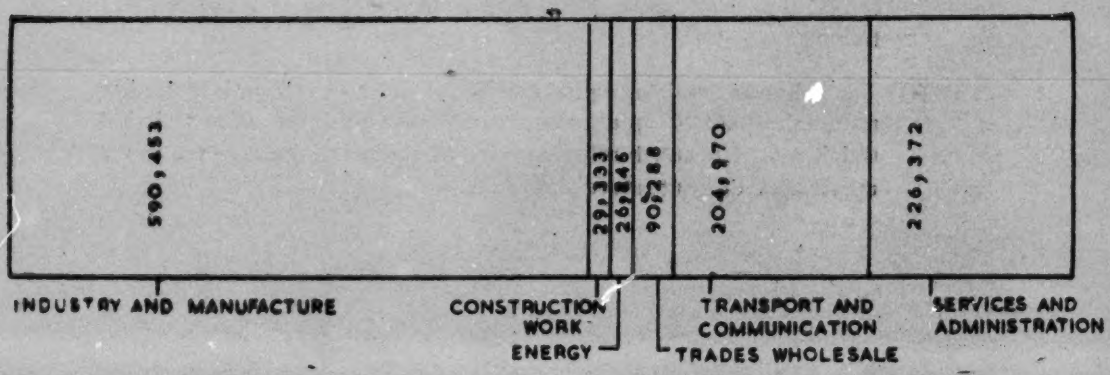
GREATER BOMBAY

TOTAL POPULATION (1971)	5,970,575
WORKERS	2,189,098
LITERATES	3,811,380

ILLITERACY



EMPLOYMENT (1973)



The educational level of workers is equally variable. Although there has been no systematic study on this subject, ad hoc studies made periodically by the Bombay City Social Education Committee estimate that nearly 50% of the workers employed in industries are illiterate. This percentage appears to have remained fairly static over the last several years.

Information regarding the ratio of skilled to semi-skilled and unskilled workers is even harder to assess. It varies from industry to industry and depends upon the manufacturing process involved. Even where employers feel the need for skilled workers, they seem to prefer to recruit unskilled or semi-skilled workers for several obvious reasons. Therefore, at any point of time, the percentage of unskilled and semi-skilled workers is always higher than it would appear suitable to the technological level of the enterprise. The problem is further complicated by the fact that apprentices move out even before the stipulated period of apprenticeship —as soon as they land other jobs.

New requirements

(i) Industries in Bombay require trained workers possessing different types of skills. Several industries are replacing old processes by new ones. Old machines are replaced by modern equipment. New technology is being introduced at different levels which demands trained workers.

(ii) A large number of workers even today acquire occupational skills by trial and error. This is difficult and time consuming. Some technical training facilities are available but the demand for such training is increasing on account of rapid industrialisation.

(iii) Workers in both the organised and unorganised sectors—skilled and unskilled workers in factories—manual labourers, clerks, domestic servants, hotel boys and others, who wish to undergo some training which will help them to get better jobs, promotions, increased wages, service security and so on.

(iv) There is a continuous influx of young people from rural and semi-urban areas. Many of them have some education. They are ambitious and conscious of their rights. They need both technical and nontechnical training.

(v) For industries, training apprentices is a statutory obligation. As they restrict the quota of apprentices, several young men requiring technical training are left out. Further, in view of the low stipend given to the apprentices, dropout rate is pretty high.

(vi) A large number of boys searching for jobs in industry and various services, are in reality unemployable (either because they are illiterate since they have not had any education, or because their education was not suitable and relevant to the jobs which they seek).

(vii) For a worker, living in Bombay itself is a type of education. The industrial atmosphere here provides challenges, opportunities, hopes as well as frustrations. He has to put up with several hardships. Thousands of workers live in slums—many spend 3-4 hours in travelling from their residence to the factory and back.

(viii) The most pressing needs of the majoriy of workers appear to be job security, better jobs, increased wages, better human relations in the place of work and at home.

Any course which enables the workers to realise these needs & to overcome these difficulties would be apparently welcomed by a large number of the employed population.

Various interests

The Bombay urban environment contains a number of positive motivational encouragements for such educational and training programmes :

(a) Every modern industrialist is keen that the worker should become more productive. So any programme which is oriented to enhance the worker's productivity is likely to be accepted and encouraged by the employers.

(b) At the same time, the urban worker at any level is also equally anxious to learn more and upgrade his ability, skill and competence, and thus enhance his professional and career prospects. This provides the intrinsic motivational element. An organised educational programme, tailor-made to his requirements, would help him in general and prepare him systematically for his job.

(c) Young people entering employment, require assistance in adjusting themselves socially and culturally to the 'labour world' and many of them to the 'urban life' which is so entirely different from what they have been brought up in. The programmes of a polyvalent centre will have to take into consideration these types of needs also.

(d) Trade unions play an aggressive role in urban areas, especially in the larger industrial sectors. But they have not so far been sufficiently

involved in the education of their members. This often makes the ill-educated workers vulnerable to political and other forms of manipulation. At the same time, unless the cooperation of the unions is secured, they can act as contrary and retarding forces to this effort.

However, there are still several opposite trends. Some employers have blind confidence in technological advances and physical investments, and constantly neglect the human elements in a modern economy. Small scale industry is less apprehensive of educational advantages for workers than the large industrial plants and big business. A large proportion of workers, particularly the illiterate and unskilled ones, have no real motivation, or at least do not reach the level of the 'felt need' for education or training. Conservative forces in society are not inclined to promote workers education, being concerned about their own vested interests.

These, and other opposing interests adversely influence the effective operation of the polyvalent education scheme.

Parameters

The above analysis brings out certain clear parameters within which a Polyvalent Centre has to conceive its programmes. These can be summarised as :

(a) the highly diversified groups of workers, geographically scattered all over the city;

(b) the widely variable structure of employing agencies and their needs;

(c) the highly volatile, fluid social structure prevailing in the city;

(d) the rapid technological changes that are constantly introduced into industry necessitating quick adjustments;

(e) the limited number of organised educational and training facilities available in the environment to match the needs of the workers as well as the industries; and

(f) the need for educational programmes which will help the workers not only professionally but also in their socio-cultural assimilation.

Therefore, the preparation of a programme necessitates as detailed a study and analysis as possible of the motivations, interests and milieu, particularly with rfeerence to the industrial structure, characteristics of workers, their special

educational and professional needs and the existing educational and training facilities available in the city. The programmes to be offered by the Polyvalent Centre need to take into account the participants' interests, needs, and aspirations in this broad frame-work. It goes without saying that it is therefore, necessary to be selective, and to make choices in consultation with those concerned with the programme, namely the sponsoring agencies and the prospective participants. There are limitations of time, budget, convenience of both the workers and the sponsoring agencies. These constraints largely influence and limit the choice of programmes that the Centre could offer.

ORGANISATION

Autonomous agency

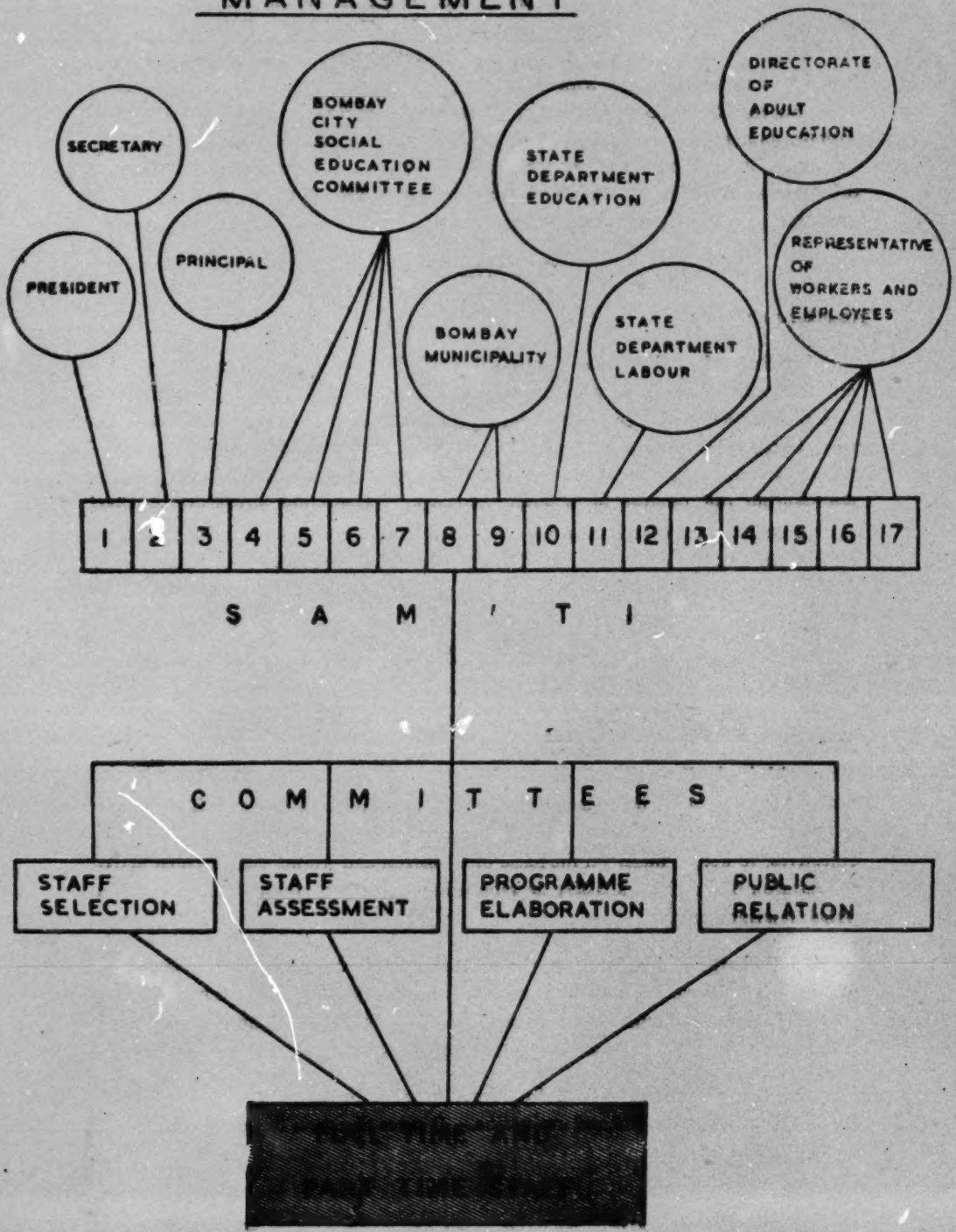
The Polyvalent Education Centre (Shramik Vidyapeeth) has been created as an autonomous organisation under the auspices of the Bombay City Social Education Committee, a non-governmental agency having a long record of adult education work in the urban area of Bombay. In organising and planning its programmes, the Centre is assisted by a managing body (the 'Samiti') consisting of 17 members representing the interests of workers, industrial undertakings, education, business enterprises, municipal authority adult education agencies, State Government (two representatives: one each from the Education and Labour Departments) the Union Government-Ministry of Education, and other related bodies. The Samiti is a policy making body. It plans and directs specific programmes through appropriate sub-committees. The day-to-day affairs of the Centre are largely left to the responsibility of the staff.

The managing body of a Centre like this has certain special roles which distinguish it from similar bodies of other organisations. In reality it function along with its 'policy making' role as a broad-based high level coordinating link and instrument of leverage between the Centre and the employing sectors. It is charged to keep in focus and to establish a balance between larger perspectives and local objectives, to keep a finger on the pulse of industrial and worker needs, enlist active cooperation of employers, assist in mobilising additional resources, and play a public relations role.

To discharge such a function, the managing body had to be as representative of industrial and workers interests as possible. Every section of the participating groups is associated with it—employers' associations, trade unions, employment-exchanges, welfare agencies and voluntary organisations.

The Samiti sets guidelines for the Centre's educational programmes, their content, location, methods and evaluation. It gives direction for the expansion of

MANAGEMENT


SECRETARY
PRESIDENT
PRINCIPAL
BOMBAY CITY SOCIAL EDUCATION COMMITTEE
BOMBAY MUNICIPALITY
STATE DEPARTMENT EDUCATION
STATE DEPARTMENT LABOUR
DIRECTORATE OF ADULT EDUCATION
REPRESENTATIVE OF WORKERS AND EMPLOYEES
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
S A M I T I
C O M M I T T E E S
STAFF SELECTION
STAFF ASSESSMENT
PROGRAMME ELABORATION
PUBLIC RELATION

the activities, for the mobilisation of all potential resources, and makes suggestions for programme development. The Samiti is responsible for awarding certificates to the successful participants, sending letters of appreciation to co-ordinating agencies, organising workshops for the academic staff, charging fees for participants in certain technical courses and so on. The Samiti also considers the annual and quarterly reports prepared by the Vidyapeeth.

The Ministry of Education, through the Directorate of Adult Education, prepared the initial operational plan, helped the Centre in developing its programmes and has since been giving continuous guidance and technical support in its development. The State Government, in addition to representation on the managing body of the Centre is expected to take overall interest in its activities especially since the Bombay City Social Education Committee is set up by the State Government and is financed by them to a considerable measure.

The staff

From the inception, the Centre has been so planned that it functions with a small compact team of professional staff consisting of a Principal and two lecturers, one in general education and the other in technical education. This means that the staff has to grow, both in number and quality, with the institution itself.

The professional staff has to spend considerable time in the field. They help the part-time instructors and resource persons in preparing the syllabus, send letters to industrialists, collaborating agencies, participants and others, arrange visits of the participants of various courses to the concerned industries and organisations, supervise courses and conduct tests. Their time is spent in arranging publicity through newspapers and other media, organising exhibitions, film shows, preparing manuscripts for the periodical and in other activities. In addition they are in charge of exploring possibilities of organising new courses.

A modest supporting secretarial staff looks after such matters as maintenance of accounts, records, and correspondence, convening of meetings, compilation of reports etc. The staffing pattern was so designed that for the type of diversified programme which the Centre has to offer, the expertise will be drawn from various sources—universities, technical institutions, industrial undertakings, and other social organisations. This system, it was hoped, would keep the programme constantly enriched and up-to-date. Necessary financial provision has been made for the Centre to pay for such services as and when required. Such services have been necessarily of a part-time nature. This arrangement has the added advantage that the Centre is able to draw into its teaching programme resource persons who are in constant and living touch with technological, industrial, sociological, and

educational developments. Furthermore, since they are working in the actual situations of their specialisations, they are able to bring realistic insights into the learning situations.

Physical facilities

The Centre is housed in the premises belonging to the Bombay City Social Education Committee. The space is adequate to meet the needs of the Centre for an office, a fair-sized library, for holding seminars and conferences, and for storage of equipment and materials. With the initial assistance extended by UNESCO, the Centre was equipped with audio-visual equipment, books and a mini-bus for use in field work, The mini-bus is now out of commission and the Centre is currently without its own transport. This cramps the mobility of the staff and affects the pace of organisation, supervision and personal contact.

Financial resources

The main source of income for the Centre has been the grant from the Government of India, which is up to a maximum of Rs. 100,000 ($13,000) per year. Most of this goes to meet staff salaries and establishment expenses. The Centre is expected to raise additional resources from the community—the employing enterprise as well as others—in the form of funds, physical facilities, instructors' services, supply of materials, etc. This has been conceived with two objects in view: (a) to augment the Centre's resources which will enable programme expansion ; and (b) for giving a greater sense of involvement to the employers and to the sponsoring agencies.

As the programmes of the Centre became more known and the benefits of the courses to the workers and to the industry more tangible, the offer of such material contribution has become more spontaneous and substantial. At least in respect of some of the more popular technical skill courses, the Centre has been able to work out the cost analysis and recover some of the expenditure in the form of tuition fees from the sponsoring agencies.

Technical and other institutions in the locality have also helped by offering their physical location, laboratories and instructors available for the activities of the Centre.

ACTIVITIES

Learning and training activities (Courses)

During the seven years since its inception (between July 1967 and March 1974) the Centre has organised 129 courses covering 43 subject areas. It trained 2,562 per-

sons of whom 408 were women. (Table I). Of these courses, 35 were held in the premises of the Centre, 41 were in the nearby localities and 53 were organized in different industrial establishments and educational institutions. In the current year several courses have been planned and some are under way.

Out of the 129 courses conducted, the emphasis in 1963 was on professional aspects of work in relation to other educational needs of workers in the organised sector; in 66 courses the emphasis was on social and organisational aspects of the life in enterprises. The first group covered different industrial fields such as: mechanical, chemical and electrical engineering, textile, film projector operation and tailoring. More than 20 language courses were conducted for workers in the organised sector. This was amplified by the courses in management and supervision, art and culture, home nursing and first aid, citizenship training, home science, clerical posts, and general education.

Yearwise analysis of the number of courses organised by the Vidyapeeth (vide Table II), shows an uneven development, with steep drops in the 2nd and 4th years of the Centre's existence, largely due to interruptions in the staffing position. In the very first year of inception, the Vidyapeeth could organise 21 courses and train 530 persons. Considering the difficulties in organising the courses in the city of Bombay and the lack of experience on the part of the organisers, this was a fair beginning. But the initial impetus slowed down during the next four years. However, the last three years, 1972, 1973, 1974 have witnessed a recovery and a steady rise in programme activities. Starting in 1972 some attempts have been made and are continued to be made to improve the programme and increase the size of the activities. This is reflected in the number of courses conducted subsequently. In the year 1972-73, Vidyapeeth could organise 25 courses, while in the year starting April 1973 and ending March 1974, it organised 44 courses—the highest number of courses ever conducted—and trained 776 persons.

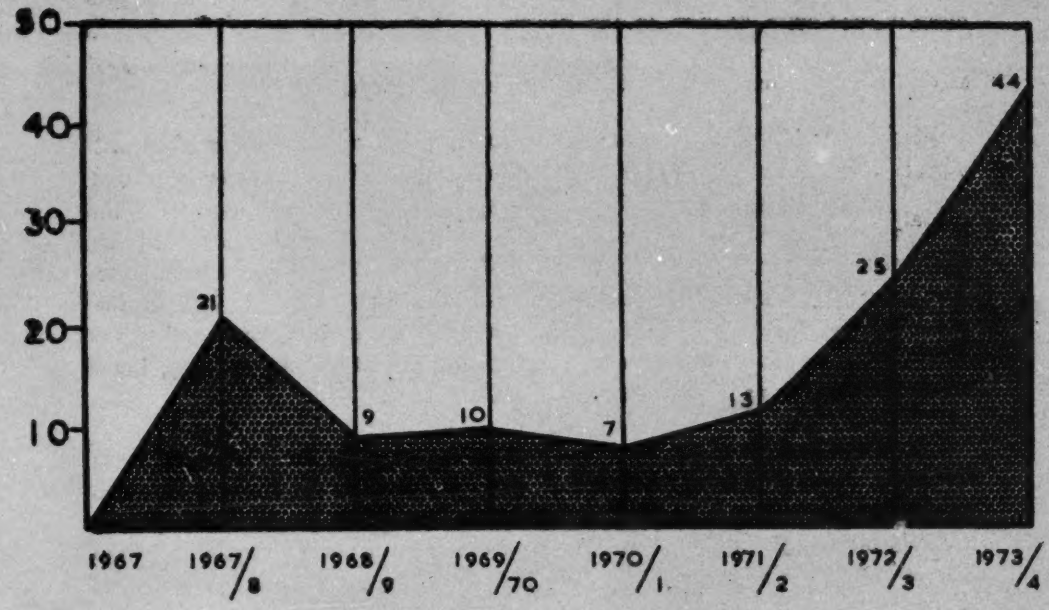
Supporting activities

In addition to and supporting the structured education-cum-vocational programmes, the Centre carries out several activities with the object of:

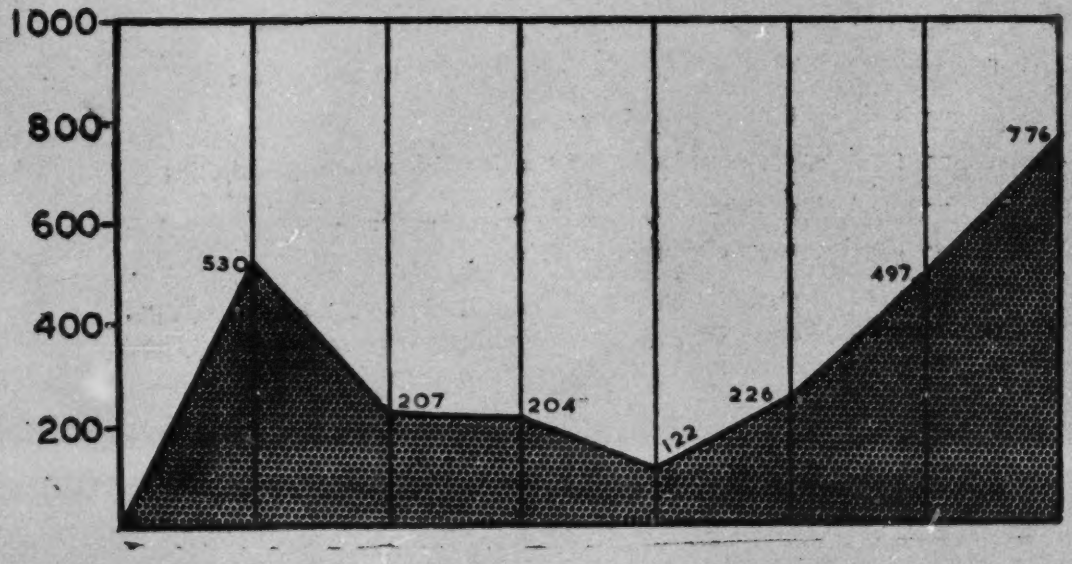
- enriching the lives of workers
- providing opportunities for social, civic and community participation
- developing a richer perspective towards life and work
- securing greater community involvement.

The Vidyapeeth's records show that thousands of people belonging to different sectors of the community participated in these activities. Cumulatively, these

NUMBER OF COURSES



NUMBER OF PARTICIPANTS



programmes have a large promotional value and popularise the Centre's objectives and programmes.

Placement facilities

Recently the Centre reported that they have been trying to give assistance to workers, trained under various courses, to better their prospects by getting higher posts. Vacancies advertised by various industrial organisations were brought to the notice of the respective categories of workers, trained in Shramik Vidyapeeth courses and they were helped in getting the advantage of the opportunities. In certain trades, such as the boiler attendants, industries also approached the Shramik Vidyapeeth to recommend its trainees for placements in their factories. It is encouraging to note that response in this regard, from the industries, is on the increase.

Periodic talks

The Vidyapeeth started to offer periodic talks on various subjects of a general nature. They are for three kinds of groups : (a) participants of regular courses; (b) ex-participants and (c) differentiated public. Topics cover a wide range of subjects: from a talk-cum-discussion on 'Reading and Literature' to a talk on 'cleanliness of clothes'; from a talk on 'Beauty of Fine Arts' to a talk on 'Humour in Life'-from a talk-cum-demonstration on television to a lecture on 'Tenancy Law' etc.

Film shows

In the last two years 74 shows of documentary and educational films have been organised. About 20,000 people derived benefit of all these film shows.

Art appreciation

Several projects aiming at the development of art appreciation among workers have been undertaken: exhibitions of art pieces prepared by the artists; demonstrations in art; screening of art films; competitions in essay writing; rangoli and art appreciation, etc.

Exhibitions

The Centre has organised several exhibitions on themes like: March to self-reliance; Freedom struggle and progress in post-independence years ; Consumer guidance, Science in everyday life. In this they have received the cooperation of several agencies like welfare organisations, departments of state governments, public health institutes, municipal corporations, schools. industries, vocational

guidance bureaus etc. Workers, teachers, students and others have visited and obviously benefitted from them.

Employment guidance

Career conferences are organised to give vocational information and guidance to young people. Employment opportunities in different fields are discussed, career exhibitions are arranged of books, leaflets, and posters on careers, lectures are held on how to start small scale industries, and employment guidance is given to those who ask or write for them, by sending cyclostyled copies of advertisements.

Follow-up contact with former participants

As a follow-up measure, the Centre involves ex-participants in its various activities. A variety of entertainment programmes are arranged every year where the staff and participants (present and former) meet informally.

Bulletin

The Centre publishes a 16 page cyclostyled bi-monthly bulletin in Marathi called *Gyandeep*. Over 1000 copies are circulated free of charge among the members, ex-participants, part-time teachers, trade unions, industries and other organisations.

In addition to regular issues, the Vidyapeeth also brought out special issues on important occasions like the Asian Regional Seminar on Polyvalent Adult Education, the Silver Jubilee Celebration of India's Independence, and on the eve of the liberation of Bangladesh.

The periodical organ of the Centre is intended to serve as a powerful medium for : creating a sense of common purpose among employers, worker, and instructors; providing further information to the participants ; offering a forum for employers, workers and others for expressing views on programmes of this kind, and promoting generally the Centre's image and its activities among the general public.

Part III

ANALYSIS

APPROACH

Policy makers and the staff of the Vidyapeeth generally state that according to their long experience the 'polyvalent approach' in adult education can efficiently enable workers to play their various roles, such as wage earners, members of a working collective, parents, members of social groups like a chawl, as citizens etc.

Unlike some other educational and training programmes for workers and labourers which focus on one or a few educational aims, the Centre for Polyvalent Education tries to upgrade knowledge and impart skills *simultaneously* and in an *inter-related* way; it tries to develop comprehension and promote awareness, as well as to help the participants to solve their daily problems and needs, considering all these aspects as correlated components. Therefore, since the content and design of the courses are the most crucial aspects of implementing the 'polyvalent approach', the success of the programme most particularly depends on how much the course is integrated.

Unlike many other existing educational programmes designed for unidentified target groups and purposes, the Centre for Polyvalent Education tries to implant each programme in a definite environment, to plan it for a particular clientele, to base curriculum on and for identified learners' needs. Therefore, besides imparting instruction and teaching various skills, the Centre is aiming to help people to change old fashioned attitudes or acquire new understanding, to overcome inertia and indifference, to acquire better working habits, to enrich their life economically, socially and culturally.

The curriculum for the polyvalent programme is designed to be a composite and integrated course which would not only meet the vocational needs of the workers but would also give them a larger perspective of the setting in which they live and work, that is a fuller understanding of the socio-cultural and economic factors governing their work-life as well as their family obligations. The curriculum is thus intended to be composed of vocational and general education elements, as well as of civic and socio-economic components, closely integrated into a meaningful whole.

From the very beginning some programmes have been elaborated in that way and spirit. However, it is only in the last one or two years that a larger, and global approach to learners' needs—their polyvalent 'nature' and 'social situation'—have been better understood and implications drawn in programming and implementing various activities.

However, it should be mentioned that a scanning of more than a few courses indicates that these basic and crucial concepts of a polyvalent programme remain to be fully realised. Some programmes are univalent, that is they remain either 'technical' or 'general'; some are an artificial mixture of vocational, economic and general topics built on an ad hoc and subjective choice, without basing it on any cohesive concept of education *relevent* to the particular group of workers. Some courses remain skill oriented for limited short-term job needs of the worker, and rarely treat him as a whole individual with many facets to his personality. 'General education' has been added to some courses as an after-thought and more as a reluctant concession to a directive rather than as an educational response to an identified need. It is not surpising therefore that the general education component remains an unwelcome intruder in the programme, receives a mechanical, gingerly treatment, and both instructors and learners wish to dispose it off as casually and summarily as decently possible. At the other extreme, the Centre offers separate general education courses unrelated to any vocational or ocupational interest or direction.

Where these weaknesses have been noticed, the result of the unintegrated approach to curriculum formulation has been:

— that the general education component, whether as a separate course or as 'additive' to the technical component, has not been meaningful to the learners and has not held their interest and attention;

— that the employers likewise do not see the value of these topics;

— that the teachers entrusted to handle the course, fail to see the purpose and relatlonship of this component, and give it a mechanical treatment.

— that above all, the programme has little impact on the learner in terms of new understandings, insights, attitudes and behaviour.

Obviously, this is an area where the staff of the Centre need to make more intensive study and analysis of participants' total requirements, to determine the content which would be relevant, and then devise methods and forms of presentation correlated with the main occupational and environmental interests. Such a curriculum can only be designed by an inter-disciplinary group of subject-matter specialists, engineers, technicians, economists, social scientists, family life, health and nutrition specialists and such other consultants as are required by the course.

Clientele

The members of the Vidyapceth believe that the Centre should cater to the needs of all the people irrespective of economic and educational background, age,

sex and employment statue. They have conducted training: for the affluent and poorer sections of the community; for men, women and unemployed youths; for the educated and uneducated alike. However, the Vidyapeeth should put emphasis on the needs of the lower middle and lower income groups, particularly in industry and in services, as well as to other poorer sections of the society.

The policy-makers and staff of the Vidyapeeth are justified in emphasizing that the Centre should cater to the needs of all the members of the family of workers so long as these needs fall within the purview of the overall objectives of the Vidyapeeth. After all, any training programme which enriches the family members of the worker will ultimately help him to lead a better life. Such an approach helps the community at large. The social setting in which the Vidyapeeth is operating demands such an approach. Therefore, in the future, different educational programmes need to be organised not only for the workers but also for their dependents.

Basic needs

One of the first requirements for implementing the 'polyvalent approach' consists in identifying the various aspects of the environment where the future learners live and work, the basic needs of the workers of different categories, the priorities for organising a programme etc. Although in some cases a sort of an initial survey has been organised, the usual practice was confined to a few interviews and to an intutive insight into the respective 'milieu'.

Differences and variations have been taken into account:

- the most important need of a temporary worker is how to improve his chances of getting a permanent job. The unskilled worker may need training which will help him to get a skilled job. The potential worker wants a job. The needs of the permanent workers are often family centred.
- the unemployed and casual workers may be trained to face an interview. They must know where they can get jobs, how to read newspapers, particularly the wanted column, they must know how to apply for a job, etc.
- a casual worker should know service prospects, importance of regularity and punctuality in promotion, and job security, how to submit a medical certificate how to report to the superior when he is late and so on.

— a permanent worker wants more knowledge about the Factory Act, trade unions, importance of saving, facilities available for children's education, availability of scholarships and other concessions for children's education, triple vaccination and family planning.

— importance of punctuality, regularity, efficiency, hygiene, neatness, saving, first aid, safety and several other topics are needed by all categories of workers, etc....

Needless to say, a thorough identification of problems and needs would put the differences between categories of workers on a more solid basis and would improve the relevance of programme contents, increase the efficiency of educational and training courses, and enlarge the diversification of curricula.

PREPARATION OF PROGRAMMES

Identification of target groups

The Centre has been adopting various methods for identifying target groups of workers and their specific needs. These include:

— circular letters to industrial establishments, business concerns, and unions to publicize the Centre's programme and to provoke demand; (The need for courses in auto-weaving, bench fitting, sheet-metal work and industrial electricity were located in this way).

— a study of advertisements in local dailies which provided clues to the type of skill and knowledge that employers demand of prospective employees: (Courses in the use of verniers and micro-meters, workshop calculations and domestic helpers are illustrative of programmes which originated in this manner).

— surveys of educational needs of particular categories of adult workers; (This was a weak area and was not systematically and scientifically pursued).

— suggestions received from the members of the Samiti technical education institutions, practising engineers, mill-owners associations, trade unions, former participants, resource persons connected with the Centre's programme at the time of conferences, seminars and individual and group discussions. (Examples of courses developed in this manner are those for maintenance fitters, heat treatment, electric motor winders, mechanical draftsmanship, workshop calculation and projector operation).

— requests received from employers who desire to upgrade and update the knowledge and skills of their workers to meet the increasing sophistication in technology. (The textile mills wanted courses in auto-loom weaving when they switched over to it from power loom technique; other requests from small and big industries included courses in power metrology, die casting, sales and income tax laws and cost control methods).

These methods, severally or together, have doubtless given some indication of employers and employes' needs and helped the Centre in getting its programme moving, especially In the initial stages. By and large, however, the choices of courses have been ad hoc and a response to short-term and snap-decision needs. If the centre is to achieve its objective of ushering a process of all-around growth of workers and of making a longterm impact, a more perspective planning of programmes should be undertaken, indicating phasing and priorities.

The phases of this perspective planning might be:

— as scientific a survey as possible of the industrial structure of the city and its specific characteristics as are of direct relevance to the Centre's programme;

— a clear idea of the geographical distribution of the industries and employing sectors;

— the nature of the employing agencies, especially from the point of view of operation and support;

— an assessment of the prio ity of demands of skill and knowledge competence;

— a futuristic assessment of the type of new demands that are anticipated, say for the next five to ten years;

— the agencies whose resources can be mobilised;

— resource personnel available.

On the basis of data provided by the survey, the Centre should then be able to determine its priorities in terms of levels of industrial establishments, categories of workers and geographical areas to be covered.

This kind of survey and assessment would need to be repeated say, every 5 years, since the structure and characteristic of an industrial area like Bombay keep changing rapidly.

So far as the employing sectors are concerned, the survey should help in identifying three major categories:

(i) the larger sized sectors which have resources and which are already organising such or similar programmes for their workers.

This group can both give to and receive from the Centre: that is, service as promotional models, offer resource personnel; and in turn the Centre could extend technical and professional services whenever required.

(ii) the middle category—which have fair-sized resources and a large number of workers, and which have not so far taken initiative in organising such programmes; the Centre will have the greatest scope and can make the largest contribution to this group;

(iii) the small industrial and sub-industrial employing agencies which have yet to develop a corporate employer-worker relationship and to recognise the need for workers education. They may not have large enough groups of workers nor the necessary physical and other facilities.

While the needs of this category is not denied, the Centre may have to give a lower priority within its limited resources. However, this should not preclude it from organising model programmes periodically as a means of selling the concept and as an incentive to these agencies to enter the ambit of the Centre's programme sooner or later.

Selection of participants

By and large, the selection of workers for admission to courses has been left to the employer, and his choice and recommendation have generally been accepted. In the case of workers who approach the Centre directly, there is some scope for exercising selectivity. In such cases, the Centre gives preference to those who have had work experience, are literate and can follow instructions in the language in which the course is conducted. However, the demand so far has never been so big that any candidate has had to be rejected for any course to which he had sought admission. Those who could not be admitted in one course were accommodated in a subsequent one.

As a result of this admission procedure which does not follow very strict selection criteria and standards, two consequences have followed : one, the groups are not homogeneous either in inital competences or in interest; second which is in

a sense a corollary of the first, there are sometimes too many drop-outs during the course.

Lack of homogeneity among the candidates affects the quality of training. For instance, in the metrology and quality control course, the group consisted of non-matriculates as well as engineering graduates. While the less qualified could not follow certain lessons, the more qualified felt bored.

Selection and orientation of resource personnel

As stated earlier, the Centre has only a small nucleus of staff—a principal, and two lecturers—of whom one is a science specialist and the other a pedagogist. Their role is primarily that of direction, coordination, and mobilisation of resources and to act as catalysts in bringing employers, employees specialists and community resources together to focus on the worker's development. They take initiative in identifying needs, planning programmes and in direction for the formulation of courses of study. It is presupposed that they work as an interdisciplinary team in themselves, with clear perception of goals and objectives.

In the actual conduct of the courses, the Centre needs a large body of resource persons. Keeping in view the needs of each course, the Centre tries to locate suitable resource persons on a part-time basis. This is largely through personal contacts with institutions, enterprises and individuals. In some cases, it has been possible to obtain the services of instructors from the technical staff of the enterprise itself. Sometimes the managements prefer to have outside instructors since they believe that this will command better respect and discipline. On the other hand, some managements prefer their own men. In actual practice, no appreciable difference has been noticed in the teaching efficiency between the two sources. Educational and professional qualifications, practical experience, capacity to relate themselves with the workers, and the ability to communicate in the local language have been some of the major considerations governing the choice of resource persons.

Incentive to resource persons

What draws resource persons from widely different fields to give of their service and effort to this programme? The honorarium given by the centre is nominal and is just sufficient to meet their out of pocket expenses on travel. The incentive would thus appear to lie in something less material : the opportunity to extend their horizon of work; the challenge it offers to reach an unusual group; recognition in the professional field; (to a few) a spirit of service and participation in a new venture.

In the long run, the centre will have to depend increasingly on the intrinsic worth and relevance of the programme to attract and hold the interest of resource persons. Some well-directed and planned steps would be necessary to build a competent, informed and pioneering team of such helpers. Such measures might include :

— well organised orientation courses, seminars and discussions at regular intervals to exchange views and experiences, and to work out common approaches and methodologies;

— organized discussion sessions with representatives of employers and workers to give first hand insights into the framework of the programme;

— substantial assistance by the centre in preparing and/or making available materials and aids to help them in conducting the classes;

— a good reference library covering the various disciplines;

— associating the names of the resource persons with the course in all the Centre's documents.

Involvement of employing agencies

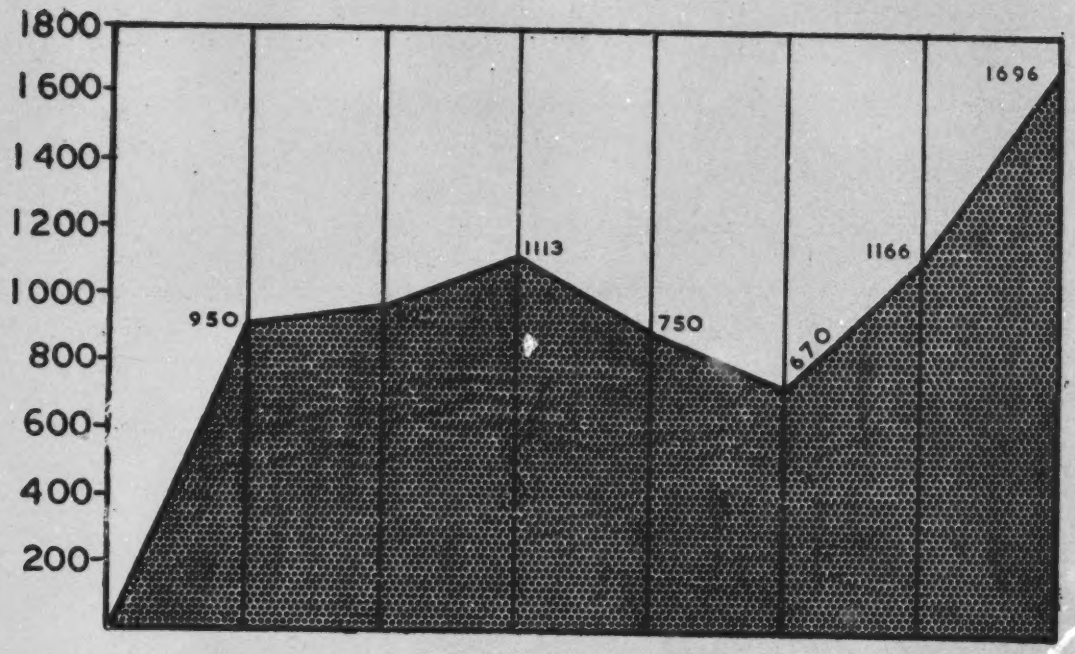
The ultimate objective of the programme is to help the workers in satisfying their basic educational and cultural needs, as well as to upgrade and promote their life, earnings, critical thinking, social involvement, responsibility etc. But one of the corrollary purposes is to crease by precept and practice a fuller understanding among employers and employing agencies of their responsibility towards the total well being of the workers of which their educational and professional growth is a major element.

The experience of the centre vis-a-vis the employing agencies has been altogether favourable and encouraging. They have responded to the Centre's requests in organising courses, provided physical location and facilities, in some cases even borne the expenses on the honorarium of the visiting teacher. Sometimes they also lend the service of instructors.

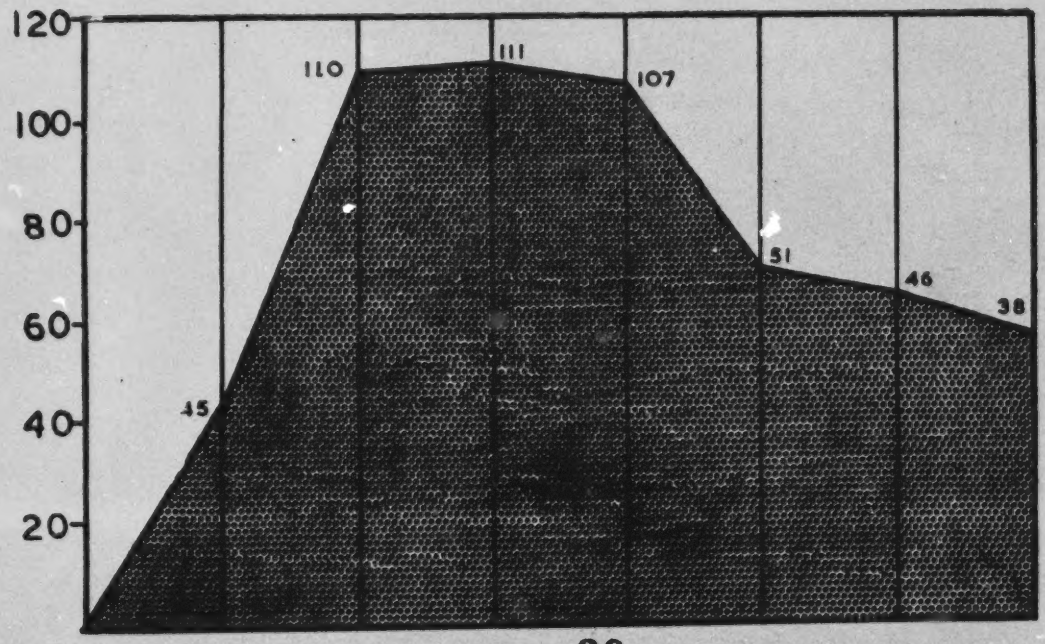
When courses are conducted in the unorganized sector, voluntary welfare agencies and educational institutions send instructors and participants, and provide training facilities.

When courses are organised for identified industrial establishments, the Centre receives all assistance from the enterprises. Such courses involve little financial commitment. The Centre provides only the organizational resources for meeting the needs of those in employment or likely to be absorbed. Similarly, the Centre had

INSTRUCTIONAL HOURS (TOTAL)



INSTRUCTIONAL HOURS (PER COURSE)



no difficulty in conducting courses for skilled and semi-skilled employees of different industries. The training facilities are provided by the industries which also meet the cost of the instructors' fee. The courses for boiler attendants can be cited as an example. They have been repeated several times. Such courses are likely to become financially self-sufficient.

The association of the participating agencies will be required on an even larger scale than in the past and at all stages of programme implementation, from pre-planning stage till much after the courses are completed. Some of the areas of cooperation can be listed as follows:

— in demanding the services of the Centre for such courses;

— in creating an awareness among its own employees of the need for development;

— in offering facilities of accommodation, equipment, practical demonstration and resource persons;

— in contributing towards the cost of the programme;

— in providing facilities and incentives for follow-up-programme for the same group and for new groups;

— in assisting in over-all supervision of the programme and in carrying out periodical test checks;

— in spreading the message of the programme to other employing agencies and organisations.

The Centre's role in this respect is even more that of a catalyst than in others—of stimulating a widening circle of employing agencies to participate in and initiate such programmes.

PROGRAMME IMPLEMENTATION

The Centre has offered a great variety of courses. As is unavoidable in this type of educational undertaking, their quality, impact, achievements are very uneven.

Without neglecting and undermining the results, some weaknesses in the implementation phase have to be highlighted:

(1) the professional inputs have not been adequate in some courses, which diminished the expected impact;

(2) there was somewhat a wastage of efforts, since various courses were not repeated, although the need for them was evident;

(3) the number of institutional hours did not grow concurrently with the evolution of the programme in its totality, which brought down the number of institutional hours per course. This affected the effectiveness of some courses;

(4) the attention paid to the methodology of learning and teaching was somewhat neglected, hence the educational quality has not reached the desired level in various subjects.

(5) there was a lack of concern for the 'software', more particularly for the preparation and production of adequate supporting materials.

More successful courses

The study shows that some of the courses conducted for particular public and private industrial enterprises were more successful than others:

The *Boiler Attendant* courses are typical of the successful programmes. Since industries replace the older boilers by more mechanised ones, workers need a working knowledge of the new mechanism. There are no institutional facilities in Bombay which provide such training at the workers level. The centre offered eight courses in this subject, employing well-trained and experienced teachers who could teach in Marathi.

Another useful course is on *Efficient Fuel and Steam Utilisation*. In the course of discussions with technical experts, the staff learnt that considerable fuel was wasted due to a lack of necessary knowledge, The centre organised three courses on the subject, and they were appreciated by participants and management alike. It is stated that the training enables the workers to save 2 to 3 per cent of fuel. If such a training is given to the employees at the supervisory level as well, it is expected that 4 to 5 per cent of fuel can be saved. There is a growing demand for such courses, and the employers are even willing to contribute towards their expenses.

The course in *Metrology and Quality Control* has been repeatedly organised to meet the demand from enterprises. It was found that industries in Bombay

generally engage unskilled workers in the inspection departments where skill is needed and there is no agency training the workers in this field. The courses conducted by the Centre have helped to fill this gap.

The courses on 16 mm. and 35 mm. *Film Projector Operation* have been well appreciated by the participants. Many unskilled workers who underwent the training hope to get through the government examinations. These courses have helped several of them to become skilled hands.

The *sowing and cutting classes* organised for housewives have been found useful. They were satisfied with the course content and the way the classes was conducted.

The courses conducted for *unemployed youth* are of special significance. The course in tailoring is a case in point. There is a large number of unemployed youth with little education and no income. They want jobs but lack occupational skills. These young men need some training which would enable them to maintain themselves. They want technical and occupational courses which will give them some employable skills. The staff of the Centre contacted some ready-made garment shops and collected information about the types of jobs available with them. They organised a short training course for a group of unemployed youth in stitching certain men's garments.

Result : Some of them are likely to be absorbed in garment factories.

The *Prospective Weavers* course was organised at the request of an enterprise. The sons and relatives of the workers of a textile mill were selected by the employer. The Centre organised the course. The expenses were borne by the enterprise. It also provided other facilities. After training, the participants would be absorbed in the mill.

The *class for adolescent boys and girls* conducted in a workers chawl was a well planned and need-based course. It was launched with the help of a probation officer of the Juvenile Guidance Centre. The Centre provided the services of a teacher and material for the participants. The possibilities in this area need to be more fully explained to the public with the cooperation of welfare agencies.

The course *for clerks* in the Department of Education of the Government of Maharashtra was a well conducted and useful course. If was run free of charge. Many participants passed the Public Examinations and got promotions and confirmation.

The course in *Domestic Electricity and Applied Electrical Appliances* conducted for housewives (and repeated for school-going children), was an interesting and useful need-based course conducted in the unorganised sector.

Less successful courses

The home science course for housewives aroused a mixed feeling. The syllabus did not cater to their real needs as they were largely drawn from the lower middle class. They also felt that the lectures on cooking did not impress. Obviously the course called for better planning, and a closer understanding of the needs of the target group.

Helper to Wiremen is a one-year intensive course conducted for potential workers. Although useful, the course was not very successful from the point of view of planning and organising. The Centre had no control over the participants and there were many dropouts. Absenteeism has been high. When the course is fully run, only a handful of young men would have completed it, at a disproportionate cost.

The *home nursing course* is a typical example of a useful subject not getting across. This was intended for women—wives and daughters of workers but they were obviously not enthusiastic. What they wanted was some skill training to help them earn a little extra. The Centre could perhaps organize such courses suitably designed, in collaboration with welfare agencies.

The courses organised for *washermen* (dhobis) had a mixed reception. The Vidyapeeth faced many difficulties in conducting this course : the participants did not understand the local language; the lectures had to be translated into Hindi; the classes were conducted from 8 P. M. until 11.30 P. M.; the participants grumbled because this encroached on their cooking and rest schedule. When the course was completed, they agreed that they had learnt new methods, but what was the use? They would not like to change the traditional method of washing clothes, since the modern method was more expensive, and the customers anyway did not pay more nor did they appreciate the superior laundering. Although discouraging at first sight and seemingly an 'unsuccess', such courses do have a purpose in driving the thin end of the wedge of change, even if it will not happen immediately.

The *citizenship training course* for hotel boys, was neither successful nor useful. The boys working in hotels want to improve their job prospects. They are unskilled and have little education. In course of time, they develop contacts with millhands and join mills as unskilled workers. A theoretical lecture-course on the value of citizenship was not what they wanted at the end of an exhausting day. This is an instance of a course that was imposed on a group without relevance to their need.

The *cartoon drawing* course is an example of a well-organised and well-conducted course, but its need was not obvious.

Resource personnel

The visiting teachers who had participated in the programme had developed favourable attitudes towards the programme and would like to continue their association with it. How much of this attitude is due to the monetary benefit that such work provides and how much to genuine involvement will have to remain in the realm of subjective speculation. A disappointing feature is that they are unwilling to strengthen their teaching with necessary aids like notes, charts etc., unless they are paid extra.

This consideration apart, they seem to be able to communicate with the learners in the local language and at the workers' level. The participants also seemed to corroborate this assessment. However, *more objective data would be necessary to assess how appropriate the methods were, whether they could be improved and if so, how.*

Methodology

Next in importance only to the curriculum is the methodology used in conveying the message of the programme to the learners.

The methodology followed by the Centre falls far short of the desired one :

- the part-time instructors teaching the courses rarely see the whole for the parts;
- there is not adequate inter-linking between the different parts of the course;
- methods of teaching are largely classical;
- there is scope for larger and more imaginative use of audio-visual aids.

The Centre would do well to give more thought to these aspects.

This means that the learner must be fully involved in the learning process and should see the entire course as a meaningful way of understanding his environment, improving his competence, making adjustments and finding answers to some of his major searchings. The methodology should be as diversified as his needs and interests are, but converging on his total development.

In concrete terms, this would mean:

- that an interdisciplinary approach is adopted;
- that one instructor alone may not be able to handle the whole course nor is it desirable to do so; on the contrary, a team of resource persons,

handling individual aspects but as parts of a whole would be more appropriate;

— that the methodology should adopt various techniques to draw maximum learner participation; group discussions, use of a variety of audio-visual aids, field visits and practical demonstration.

It is certain that some work done in India to improve and innovate the teaching and learning methodology for adult education, as well as the preparation of curriculum and learning materials (as part of other programmes, like the Farmers Functional Literacy Scheme) will be of a certain relevance to and help in the promotion of pedagogical aspects in the Vidyapeeth.

Learning materials

By the very nature of the programme, there can be no pre-determined and prescribed texts.

The Centre has made some attempts to prepare such materials for some of the courses, especially in the initial years, but by and large the initiative to prepare teaching-learning materials has been left to the instructors. As stated earlier, not all instructors had taken equal effort to prepare such aids. The entire process of material preparation needs to be planned systematically and professionalised. Learning materials will need to be prepared for different courses depending on the particular requirements of learner groups. This can take the form of cyclostyled learning sheets, hand-outs on topics of special interest, work sheets, diagrams, sketches, extracts from books and periodicals etc. Some material can also be borrowed from other local sources and adapted for the Vidyapeeth's needs. The staff of the Centre should mobilise professional and technical assistance in preparing these materials as also supporting aids like charts, work sheets, models, etc.

Audio-visual aids

The Centre was initially equipped with basic audio-visual equipment. They were intended to be used for providing audio-visual support to the programme. This support remains to be built through the acquisition or loan of graphic and non-graphic aids appropriate to the courses.

As teaching aids, they should be more used *during* the courses and not merely for entertainment purposes. These aids properly used should help in : (i) motivating the learner groups; (ii) focussing attention on specific aspects; (iii) reinforcing or illustrating concepts; (iv) facilitating the simulation of social and cultural situa-

tions; (v) presenting desirable goals of social and cultural behaviour; (vi) demonstrating some of the more advanced and sophisticated technological processes.

In fact many aspects of the general education component can be most profitably treated through these aids and will be much more meaningful than a formal lecture on discipline, citizenship or Indian culture.

Library

The Centre has a fair-sized library hall and a small collection of books. However, it is still to develop as a supporting service to the programme. Its utility can be enhanced in three directions;

(a) to serve as a well-stocked reference centre for preparing the courses of study, learning-teaching materials and aids;

(b) to provide reading materials to the learners' groups. This could be done by organising a system where the materials could be circulated among the members of a group during the course.

(c) to provids further reading materials.

Later on, along with the Centre's development, the library may be transformed into a proper self-study centre.

Supervision

One might think that because it is a non-formal programme depending on voluntary choice, it does not call for a formal system of supervision and report. While neither the non-formal nor the voluntary nature of the programme is in doubt, any serious activity to justify the effort and cost, calls for an optimum input and discipline. A process of supervision—whether internal or external—is to ensure just this firmness.

At present, supervision is done by the three members of the Centre's staff and is dependent on the availability of time and transport. The results of supervision are also not fed back into the system in a planned manner.

It is obvious that with several courses going on simultaneously in scattered parts of the city, the small band of the Centre's staff cannot do justice to the supervision by themselves. Nor is that the long-term objective. It should be the endeavour of the Centre to induct a band of persons drawn from various sources to help in this task, as for example, selected persons in the employing organisations and resource persons.

The purpose of supervision is not one of marking attendance or of policing the classes but is really to ensure that : all the facilities are made available on time; the courses are progressing on schedule; the programme is holding the interest of participants and is meeting its objectives; the methods of teaching are appropriate and the courses are adequately equipped; the cooperation of the enterprise and the learners with the programme is obtained; and adequate steps are taken to rectify shortcomings and remove hurdles.

Cooperative supervision to be successful should be carefully preplanned so that there is common understanding of what should be looked for and ensured and that there are no contrary and confusing judgements.

A well organised system of supervision will also provide mid-way evaluative data on the basis of which future courses can be revised and improved.

Evaluation

Initially, no systematic procedure for evaluation of the courses was laid down. Subsequently, effort was made to include such procedure, which generally consisted of a pre-test and a terminal test. The pre-test, however, was administered orally in the beginning of the course. Generally a terminal test was administered to find out how much the participants in the course were able to learn. In addition, a group discussion with the participants was often held in the concluding session, during which they were able to give their opinions and suggestions in a prescribed form. Views of the instructors and the employing agencies who sponsored the participants were also elicited. But conclusions arrived at were vague and unprecise. Little systematic effort was made to record, analyse, interpret and feed back. Except in a few courses, no scientific evaluation procedures were observed.

In terms of impact studies, the first evaluative study of the Centre made by the Tata Institute of Social Sciences (in 1969) was the only worthwhile attempt.

Gradually, along with the further improvement and development of the Vidyapeeth, and particularly with the increase of the professional staff, evaluation has to become an built-in component. As a general orientation, the evaluative process may be carried out in the following stages of various programmes.

In the beginning : as a first step to assess the level at which particular programmes could be conducted and to assess the knowledge and skills already possessed by the learners. This can be done by conducting pre-test in the beginning of the courses. The result obtained could be used in directing the course content as well as the methodology and thus setting the teaching process according to the level

of understanding of the participants. Such a pre-test can be conducted by administering constructed questionnaires, or by having the trainees perform certain operations related to their work.

Mid-course : Mid-course evaluation will help to find out whether or not the participants are able to learn what is being imparted during the course, whether the methods and materials are appropriate enough in promoting learning goals and to judge the suitability of arrangements made for conducting the course. This kind of mid-course evaluation can be organised only in respect of courses that run for a reasonable duration—say, not less than eight weeks.

Terminal evaluation : Terminal evaluation conducted towards the end when the course is finally terminated, will help to assess the learning gains in terms of knowledge and skills intended to be imparted.

Impact evaluation : The impact evaluation may be conducted as the follow-up of the course through case studies of certain courses, through constant assessment of the courses conducted in terms of cost benefit analyses and in terms of learners performance on the job after participation in the course conducted by the Centre

The Centre has been maintaining records of all those who have participated in the various courses and it would be worth attempting to make certain case studies and design follow-up studies in order to assess the impact of the courses on the participants, the employing agencies and the overall effectiveness of the courses on the individual workers and their environment.

Cost benefit analysis: At present there are no systematic and scientific data on how much each course costs, on what items, sources from which the cost is met, the cost per head and the comparative pattern of costing between different types of courses in varying situations. In the absence of such information, precise planning of programmes and long-term estimating is not possible. Some effort has been made to reconstruct costing pattern of some of the courses held during 1973-74.

The Centre should swiftly move from a grant receiving and spending stage to a professional, cost-conscious system. This is essential even to be able to provide data to enterprises on the costs involved in such programmes.

Reactions of participants, employers and trade unions

Discussions with participants—carried out both as part of the staff members' regular work and as part of this evaluation study—reveal that they are mostly

satisfied with the courses which the Centre organises. The unemployed youth and potential workers stated that they had gained knowledge and confidence. They were satisfied with the course content, organisation and methodology. Some workers suggested more emphasis on occupational courses like radio repairing, watch making, transistor repairing and coil winding for their family members to enable them to supplement their income. Housewives wanted courses in sewing, embroidery, and doll-making which would help them to take up odd jobs in their spare time.

Skilled workers had gained better prospects and were less exposed to industrial hazards: unskilled workers had become semiskilled, and their chances of getting employment had become brighter; the period of on-the-job training of potential workers could be reduced substantially because of the training given by the Centre. Many participants feel that they have gained knowledge and that their chance for vertical and horizontal mobility has increased; several of the workers have passed the technical examinations conducted by the Government of Maharashtra; some have received promotions and wage increases.

The employers who responded to the mailed questionnaire have invariably appreciated the course content and end-results. They believe that the courses have contributed to the efficiency of their employees. Some state that the training has led to better human relations in their industries. Many want the Centre to run more courses for their workers.

It should be mentioned that a small section of industrialists does not favour outside agencies running courses for their workers. They fear that such training leads to industrial unrest. Promoting the idea of polyvalent education among them is difficult at this stage.

Even when employers are ready to extend cooperation for training workers, there is yet another difficulty. This is of sparing workers during the factory hours. The ill-paid and exhausted worker, worried about the rising prices and anxious to reach home is hardly in a mood to receive educational training after the day's hard work.

The workers in the unorganised sector—washermen, domestic servants, hotel boys and others need polyvalent education the most. They are socially and economically handicapped people. They have little or no formal education, are not happy with their jobs, have no job security, and future prospects. In the absence of any incentive they express their unwillingness for training in their respective professions even when they are convinced that it will make them better workers. The cultural, civic and general education programmes do not make

much impact on them except of course some light entertainment. There is also the problem of communication. The Vidyapeeth will have to spend much time in identifying their urgent needs, and then arrange suitable programmes.

In the beginning, the Vidyapeeth was spending considerable time in planning a course. Even after planning there used to be delay in starting a course. This was mainly because the employers, the teachers and even the workers were not quite sure of the success of such courses. Today, the picture is different. With the growing awareness of the activities of the Vidyapeeth among the industrialists and prominent citizens, demands for different courses are increasing.

In fact, requests for courses come from youth organisations, vocational guidance associations, women's organisations and social workers. The demand for certain types of technical courses (like the course for boiler attendants) is increasing. The Vidyapeeth is in a better position to organise courses in the organised sector.

Trade Unions, on the contrary, have generally remained indifferent for political reasons. The Rashtriya Mills Mazdoor Sangh does extend some limited help. Other trade unions are yet to respond. Because of trade union politics, there is little involvement of workers through trade unions. The Vidyapeeth will have to pursue efforts to involve trade union leaders on a wider basis in programming and implementing various activities of the Centre.

Future scope

There is immense scope for developing the Polyvalent Centre. The workers, both the present participants and the potential learners, feel more and more the need for some additional training and knowledge. The employers, both public and private, need their workers to be trained and be more efficient. The idea of such type of workers education has still to be 'sold' to many of them, as well as to be spread much wider than already achieved.

This evaluative study shows also that there is scope for a larger number of such centres. As already mentioned, the polyvalent adult education centres have special role to play in the socio-economic dovelopment of this country. India needs many more centres in urban areas—in metropolitan cities, middle and even some smaller towns.

Part IV

CONCLUSIONS

SUMMING UP

1. The Polyvalent Adult Education Centre (Shramik Vidyapeeth) was started in 1967 by the Government of India as an innovative experiment in developing and offering comprehensive programmes of education to meet the many-sided needs of the urban worker in an industrialised city like Bombay. The present study is the second evaluation of the Centre during its 7 years of functioning. The experience of the 7 years bears out the validity of the concept of polyvalent education and indicates its infinite possibilities.

2. The educational and professional needs of the urban worker have been by and large neglected and this experiment is one of the first organised attempt to make employers and employees conscious of the importance of such programmes in their mutual interest. To the extent that was possible within the short time and limited resources, the Centre has been able to create this awareness among the employing agencies and the workers' groups with whom it has come into contact.

3. The centre has offered several courses during these 7 years, many of which are of an exploratory character, some more skill-oriented than others. Although the full possibilities of the 'polyvalent integration' of courses could not be realised in all cases, by and large it can claimed that the courses had succeeded in meeting the requirements of both employers and workers. Employers have generally, been convinced of the usefulness of such programmes in improving the workers' efficiency and the industry's productivity. Workers have benefited both in terms of personal fulfilment and in respect of securing increased career mobility and prospects; however the benefit was less prominent from the point of view of their readiness for social and civic participation.

4. All courses have not always been well planned and organised nor have they been equally successful. Some have met a sharply felt need and have had to be repeated several times, while others have been of only peripheral relevance. Some

have shown immediate and direct result, others have seemed of academic and remote interest. Nonetheless, the successful and the not so successful courses have both gone to prove the importance of a clear identification of felt needs, of aligning programmes to meet these needs and of adopting suitable methodologies.

5. The Centre has been able to establish rapport and empathy with workers, voluntary agencies and resource persons of various categories. This has been of sufficient degree to secure their cooperation in providing physical facilities, offering the services of resource personnel, and even in contributing funds. Resource persons have been sufficiently drawn into the programme to wish to continue their association with it. The Centre has been able to augment limited resources to support several more courses than what its own funds would have permitted.

6. The development and growth of the Centre and its programmes have however been uneven, and periodic spells of stagnation have stalled progress. It is only in the last two years that the Centre has picked up some momentum again. Quantitatively, the record of the Centre over the seven-year period falls short of expectations both in terms of courses offered and in terms of workers and employers' organisations brought within its ambit. An optimum coverage is indispensable for a new experiment to create a tangible impact. A larger coverage is particularly necessary in an environment like the city of Bombay, where the needs for such type of education is constantly growing.

7. Many programmes tend to be ad hoc responses to ad hoc needs, with little conception and no long or short-term goals with reference to clearly laid out objectives.

This adhocism is most noticeable in course formulation. The polyvalent possibilities of the courses have not been fully understood or exploited.

It is in the area of course planning and formulation that the Centre is yet to make a real dent, and adopt a truly innovative and interdisciplinary approach. Polyvalency of programme or method largely remains a respectable and fragmentarily implemented term rather than a generally realised concept.

8. It is time that the Centre grew out of a hesitant, tentative phase to a bolder, surer and more professional approach to programme organisation and operation.

RECOMMENDATIONS

(I) Role and Function

1. The polyvalent centre has been conceived of as an innovative experiment in continuing education for urban workers. Its primary responsibility is to explore, innovate, work out alternatives, try new methodologies and make this experience available to others working in this area and inspire other agencies in Bombay and elsewhere to make similar experimentation. The entire area of urban adult education is unexplored and there is very little organised experience to draw from. The Centre is thus an experimental venture in more sense than one and its experiences can spearhead a new movement in urban continuing education.

2. To preserve this spirit of exploration and innovativeness, the Centre should guard itself against following a set pattern of courses in an unchanging, repetitive routine. Every aspect of the programme should be carefully designed, tried out and evaluated and results fed back into the system.

3. One Centre can never cater to the needs of all the worker population of a city like Bombay. The long-term goal should therefore be to spread the message of the polyvalent concept and programme among workers, trade unions, voluntary organisations, employers, social workers and public and private sector undertakings so powerfully that it will have a multiplier effect not only in Bombay but in other urban and suburban centres as well. The Centre should constantly keep its sights trained on this objective.

4. Since the achieved impact on a complex environment is the main criterion of the results of such a Centre, it is constantly necessary to keep in view the necessity of enlarging the size of the Centre's operational activities. The present level has not yet approached the optimum size.

(Ii) Study of Milieu

5. The first and foremost task of the Centre is to gain a complete and precise understanding of and insight into the employer-worker-industry structure which it has to serve. Periodic surveys and studies should be undertaken to

collect data on the size and structure of employing agencies and sectors, the needs of the workers (personal, educational and vocational), the demands of industry in terms of skills and competence, future demands, the special problems of the milieu, resource facilities, etc. Such quantitative and qualitative appreciation of the milieu is necessary to assess the size and characteristics of the situation, its strengths and problem areas and to plan accordingly.

Such surveys and analysis can be organised with the help of teams of specialists, and institutions and agencies already working on related areas.

(iii) Programme Planning

6. Based on the data yielded by these surveys, supplemented by discussions with selected groups of employers, workers and others concerned, the programme of the Centre should be drawn up in long and short-term perspective, indicating priorities—in terms of employment areas, skills and competences in demand, levels and categories of workers, duration of programmes, and resource help necessary. A blueprint thus drawn up and widely circulated would keep all those directly and indirectly concerned fully informed of the Centre's proposals and help in advance planning and preparation.

(iv) Target Groups

7. The participant groups should cover a wide range of employed men and women, including unemployed youth, potential workers, wives of workers, distributed among an equally diversified range of employing sectors, in big and small groups, and located over an extensive geographical area. Selection of skilled and specialised workers for the classes has been by and large left to the option of the employers. The Centre exercises very little selectivity. Learners groups are as a consequence often heterogenous in motivation and educational and vocational competence. This aggravates the incompatibility between the course content and treatment and the group's interest. Detailed and careful initial surveys would help to obviate the situation. Taking all these factors into consideration, the Centre should determine its priority target groups and their specific requirements so that its energies and resources are wisely channelised.

(v) Course Curriculum Design

8. There are categories of workers and labourers (particularly unskilled ones, members of lower income groups, slum dwellers and unemployed and other under-privileged groups) who are practically excluded from benefitting from many of the educational, vocational, cultural and recreational activities in the urban

setting. The Shramik Vidyapeeth has to fill these gaps and to take care of, as one of its highest priorities, the basic needs of thousands of workers in the deprived sections, under-privileged castes and poorer groups.

9. Courses and curricula need to be carefully formulated in relation to the needs of employer and employee, and should be a suitable and adequate combination of elements which correspond to a 'full', 'complete', 'polyvalent', 'multi-sided' human being—a polyvalent approach to education being a simultaneous combination of vocational, technical, scientific, ethical, social, civic and other educational and cultural components. The objectives of each course should be unambiguously defined having in mind the complexity of learner needs, and the content should be fully spelt out indicating sequence, instructional hours, practical work, demonstration, materials and aids needed, etc.

Such course formulation should be organized with the help of inter-disciplinary groups and in consultation with prospective learners, employers and technical specialists.

(vi) Learning Material Production

10. Once the course curriculum is formulated, the Centre should prepare the necessary learning materials—work books, content sheets, charts, drawings, reading materials, teachers' guide, etc.—again with the help of appropriate specialists and the instructors concerned. These materials should be periodically revised and updated on the basis of experience and participant reaction and new technical and scientific knowledge.

(vii) Methodology

11. Since the polyvalent approach is a new concept, the methodology of presenting the course should be carefully discussed and worked out jointly with the instructors and curriculum designers. Methodology suited to the polyvalent nature of the programme remains to be developed. At present it is largely traditional, the liveliness or otherwise of the programme depending entirely on the enthusiasm and resourcefulness of the instructor. Special attention is needed to bring out an integrated approach which will meet the many-sided needs of the learners as also ensure their active participation. The aids that should be used, sources from where they can be obtained, other resource persons who can help, activities to be organised, need to be spelt out.

(viii) Resource Persons (Instructors)

12. Since the Centre has to organize several programmes simultaneously, it has to mobilize the services of teams of resource persons (a few full-time, but

many more part-time or voluntary workers). The Centre would do well to identify a large number of such persons (educators, technicians, skilled workers, various professionals, unemployed youth etc.) and make a careful study of their educational and professional qualifications, experience and interests in this programme, their ability to handle such adult groups, aptitude for establishing rapport with employers and workers alike, familiarity with industrial structure, characteristics and needs, and above all the ability to adopt a flexible, forward-looking approach.

13. The resource persons may be continuously associated with all the stages of programme formulation and implementation especially with the designing of the curriculum, determining the methodology, preparation of aids, devising of evaluative tests, etc. Orientation and discussion sessions may be organized at regular intervals especially before courses commence, to ensure maximum efficiency.

(ix) Evaluation

14. Evaluation process needs to be gradually and systematically built into the programme. This is an important but difficult task—and careful preparation is necessary, bearing in mind the available staff and competencies. It would be necessary to maintain records on the educational, vocational and socio-cultural status of workers *before* they enter the programme to provide data on the basis of which achievement can be measured *at the end* of the course. Some process of mid-course evaluation would also be required in the case of the longer courses to provide data for improvement. Evaluation tools may be devised to measure the learner achievement in terms of course objectives, the impact on industry and employers' reaction.

15. Full records need to be maintained about venue, names and qualifications of participants, duration and timings of courses, names of instructors, facilities provided by employers, contributions made, rate of attendance, details of drop-outs, learner achievement, materials used, practical work done, participant-employer reaction—follow up effects of the course on the workers and industry. per capita cost analysis, difficulties encountered and suggestions for the future. Such carefully recorde data will provide the basis for improvement and enlargement of the programmes, for follow-up and for guidance to other programmes.

(x) Supervision

16. Adequate professional supervision of the programmes needs to be ensured, not necessarily through the staff of the Centre only, but as a cooperative arrangement among resource persons, representatives from employing agencies, etc.

Clear guidelines are necessary to ensure that all those involved in supervision adopt a common approach.

17. Various cultural, artistic, social and similar activities are a necessary part of educational courses, if a wider humanistic approach has to be followed and a narrow technocratic attitude to be discarded. They should be incorporated right from the programming phase.

(xi) Other Services and Activities

18. Activities like exhibitions, film shows and similar audio-visual activities may be so arranged that they lend additional support to the courses organised by the Centre especially in respect of the general educational content, as well as motivational and recreational element.

19. The bulletin may be so developed as to serve as a forum for exchange of views among the various individuals and organisations engaged in this programme, including the workers. The issue should also reach the workers themselves who may also be encouraged to contribute their views and experience to the bulletin.

20. The centre may initiate action for offering consultative, clearing house and documentation services to employing agencies, voluntary organisations, research institutions, adult education agencies who desire to study the programme or to organise similar programmes.

(vii) Community Involvement

21. The constitution of the managing body may be broadened to include wider interests of the employing sectors, trade unions and other agencies who can contribute directly and effectively to the promotion of the programme.

22. Promotional efforts need to be enlarged and systematised with the objective of multiplying the polyvalent concept among other agencies. Ultimately it should be the endeavour of the Centre to generate so much enthusiasm and conviction in the programme that sub-centres will come up in different areas of the city through other initiatives.

23. Periodic discussion meetings and conferences with different sections of employers and trade union representatives and other promoters would help in keeping a two-way flow of information and involvement sustained.

(xiii) Finance

24. The Centre's activities and the concept for which it now stands have now been largely accepted by employers and workers alike, to the extent that contributions in kind and cash are forthcoming. It is time that the Centre institutionalised these positive responses. Sooner rather than later, the local community and the employing agencies should make effective use of the available resources and accept the responsibility for meeting a part of recurring cost of the courses. The long-range objective may well be to ensure that every employing agency should make a permanent provision in its budget for subsidising such programmes for its workers. The Centre may work out cost analysis of the different courses on the basis of which the employing agencies can assess their commitments.

(xiv) Organisation

25. The staff of the Centre should build itself for a professional leadership role *vis a vis* adult educators, curriculum makers, employers, and others working in the area of urban workers education. Study circles, staff discussion sessions, systematic recording and analysis, and constant exchange of views and experiences would help in maintaining the focus on the objective of the programme.

26. The Centre was located with the Bombay City Social Education Committee primarily because that organisation had a long established experience in the area of adult education and the contacts and spirit of dedication to a cause would facilitate the new Centre in its work. Experience has fully borne out these expectations. B.C.S.F. Committee has lent the weight of its prestige, stature and influence to the Centre which was of particular value in the early stages. The stage has been reached when the Centre should wean itself from that relationship and develop greater autonomy of thought and action. This is important if the Centre is to reach beyond the compulsions and framework of literacy programmes to the much more complex demands of the urban worker.

FUTURE PROSPECTS

1

The Bombay Polyvalent Centre makes only the smallest of beginnings in an effort to understand and meet the continuing needs of workers for better adjustment to life and work. It symbolises the national awareness of the special problems, searchings and aspirations of citizens who have hitherto been taken for granted.

2

As the country increases its economic and industrial base, so will the strength and mobility of workers increase. And as scientific and technological explosion accelerates the pace and form of change in employing and employable structures, the more compelling will become the worker's need for help in making appropriate adaptation in style and skill of work, in social attitudes and in personal harmony with the environment. As the democratic path deepens, workers and citizens in general will have more possibilities for active participation and involvement in public matters and in solution of their own problems and needs. So will increase their need for more knowledge, education and information.

3

With the advent of the mass media age, workers are becoming more conscious of 'the better life'. They are no larger content as they once were, to be resigned to a static point of work and life style. The more the circumstances have denied them the privileges of a good education and a good start in life, and the more they see doors to opportunities closed, the greater the frustration and sense of exploitation. A democratic society committed to an egalitarian social order, cannot long ignore the unfulfilled aspirations of a section of its people on whom rests its develoyment.

4

The biggest need of the workers is to move up in his job—that way lies the path to better economic status, and to all the benefits to personal life that follow. Hence the stress on skill and job oriented programmes.

5

Enterprises need a higher productivity level and their workers to become better skilled, but this should happen without the workers becoming less of robots and more of thinking workers and responsible citizens. Herein lie the contradiction and the challenge.

6

Equally important, even if not understood or articulated, is knowledge about one's own role, duties, obligations to oneself and others—the family, work situation and society—as well as knowledge and awareness which enables one to react to the world of work with autonomy and understanding.

7

The polyvalent concept seeks, therefore, to make a three-pronged thrust: on the society, its various forces and factors, to take more responsibility for the often undermined educational and cultural needs of workers; on the employers to take a long range view of worker-efficiency and industrial health; and on the employees to adopt constructive methods of improving their socio-economic status and their contribution to industrial efficiency and to the strengthening of democratic procedures. From this point of view, the content of the polyvalent programmes takes on added significance: Through such carefully designed programmes, it is hoped to reach a stage where the exploited-exploiter element will be minimised. The perfect equilibrium may never be reached but it is a goal towards which the educaitonal enterprise needs to inch forward.

8

Once there is general awareness and acceptance of the obligations by the society in its global framework, by the municipalities and employers to the workers needs for their educational and professional growth, various initiatives and programmes follow : polyvalent programmes could be undertaken by governmental and voluntary agencies, by local bodies, by organised public or private sector undertakings, and by industrial employing agencies.

9

From the financial and organisational point of view, polyvalent education need not be only a governmental responsibility. Many employing agencies—public or private will, it is hoped, build into their framework, the necessary physical facilities and financial allocations for worker education programmes as

an integral part of their organisation. This should include the provision to subsidise the worker's attendance at such programmes through paid education leave, promotion facilities, wage increments, book and material allowance and provision of library facilities.

10

In the Fifth Plan (1974-79), Government of India propose to start more such centres is other urban and semi-urban areas. Location of such centres at Delhi and Ahmedabad (Gujarat) already stands approved. Some voluntary agencies and universities have also shown interest in organising such programmes for special groups of workers even in semi-rural areas. Such efforts will doubtless open up new possibilities and techniques and provide new insights into this area of adult education.

ANNEXURES

TABLE 1

Annexure-A

DETAILS OF THE COURSES CONDUCTED BETWEEN 1967 AND 1974

Year	No. of courses conducted	Total number of participants	Total number of men trained	Total number of women trained	Total number of instructional hours
1967-68	21	530	355	175	950
1968-69	9	207	157	50	992
1969-70	10	204	204	—	1113
1970-71	7	122	122	—	750
1971-72	13	226	226	—	670
1972-73	25	497	466	31	1166
1973-74	44	776	624	152	1696
TOTAL :	129	2562	2154	408	7337

Annexure-B

TABLE II

DETAILS OF COURSES CONDUCTED (YEARWISE)

COURSES	67-68	68-69	69-70	70-71	71-72	72-73	73-74	Total
1	2	3	4	5	6	7	8	9
1. Weaving	1	3	—	—	—	—	5	7
2. Bench Fitters and Sheet Metal	1	—	—	—	—	—	—	1
3. Mechanical Drafsman	—	1	1	1	—	—	—	3
4. Projector Operation 16 & 35 m.m.	—	1	1	—	1	3	8	14
5. Industrial Electricity	—	1	—	—	—	—	—	1
6. Boiler Attending	—	—	2	2	2	2	—	8
7. Workshop Calculations	—	—	2	—	—	—	—	2
8. Use of Vernier & Micro-meters	—	—	1	—	—	—	—	1
9. Metrology & Quality	—	—	—	1	1	3	2	7

	1	2	3	4	5	6	7	8	9
10.	Maintenance of Chemical Plant	—	—	—	—	1	1	1	3
11.	Scooter Maintenance	—	—	—	—	2	2	—	4
12.	Efficient fuel and steam utilisation	—	—	—	—	—	1	1	2
13.	Wiremen domestic electricity and allied electrical appliances	—	—	—	—	—	1	2	3
14.	Course for Jobbers	—	—	—	—	—	4	1	5
15.	Course in tailoring	—	—	—	—	—	2	—	2
16.	Home Science	2	—	—	—	—	—	2	4
17.	Art & Culture Hobby etc.	1	—	—	—	—	1	4	6
18.	Functional English Basic English	15	—	—	1	1	—	4	21
19.	Secretarial Courses	1	—	—	—	—	—	—	1
20.	Supervisory Skills/ Middle Management	—	1	2	2	4	3	2	14
21.	Home & Family Living Domestic Services	—	2	—	—	—	—	—	2

1		2	3	4	5	6	7	8	9
22.	Functional Marathi	—	—	1	—	—	—	—	1
23.	School Administration	—	—	—	—	1	—	—	1
24.	First Aid Home Nursing	—	—	—	—	—	2	3	5
25.	Music Appreciation	—	—	—	—	—	—	1	1
26.	Course for Clerks from Education Department	—	—	—	—	—	—	2	2
27.	Training Course for Peons	—	—	—	—	—	—	1	1
28.	Laundry Workers	—	—	—	—	—	—	1	1
29.	Cartoon Drawing	—	—	—	—	—	—	1	1
30.	Citizenship (Hotel Boys)	—	—	—	—	—	—	4	4
31.	Utilisation of Bank Services	—	—	—	—	—	—	1	1
							Total :		129

Annexure-C

Case Studies of a few Selected Courses

Case 1

Course for Boiler Attendants

Batch No.	:	I	II	III	IV	V	VI	VII	VIII
Dates of Commencement	:	23.9.69	4.3.70	15.9.70	22.2.71	16.8.71	27.3.72	4.12.72	12.11.73
Dates of conclusion	:	30.1.70	10.7.70	30.1.71	30.1.72	31.1.72	18.9.72	21.5.73	7.8.74
No. of partipants enrolled	:	23	19	17	19	20	20	19	14
No. of participants completed the course	:	11	18	14	10	10	10	13	6
Duration	:	5 months							
Weekly sessions	:	3 sessions							
Instructional hours	:	90 hours							
Place where conducted	:	Century Mills, Worli, Bombay-13							
Medium	:	Marathi							
Timings	:	4.30 p.m. to 6.00 p,m.							
Names of the Lecturers	:	1. Shri M. G. Bijur, Retd. Boiler Engineer 2. Shri S. V. Velankar, Consulting Engineer 3. Shri S. M. Newalkar, Lect. Wadia Tech. Instt.							

Collaborating Agency	:	**Century Mills, Worli, Bombay-13**
Nature of Collaboration	:	**Well furnished class room**
Financial aspect	:	**Expenditure for each batch Rs. 2000/- (Rs. 1500/- as honoraria and Rs. 500/- for stationery)** **No fees were charged for the participants in the first two batches** **Each participant in the subsequent batches paid Rs. 40/-**

Evaluation :

1. In the course of discussions with some industrialists, the staff of the Vidyapeeth came to know that there was a dearth of trained boiler attendants. The workers who wish to qualify themselves to get the promotion of boiler attendants, should pass the technical examination conducted by the Government of Maharashtra. There is no agency in Bombay which can prepare the workers for the examination. The Vidyapeeth undertook the task of organising courses for workers working in this field.

2. In consultation with the Chief Inspector of Boilers, Government of Maharashtra and with the help of some boiler engineers the staff of the Vidhyapeeth prepared the syllabus. The syllabus was also geared to the needs of workers who wished to appear for the examinations. The syllabus also contained the general education component. The topics covered in the course of training along with technical and vocational matters included job satisfaction, citizenship trainining. Indian culture and history, budgeting and saving, self-education, healthy use of leisure and others. With the help of visiting teachers, the staff prepared some charts and diagrams which were used in the course of training.

3. The selection of the participants was made on the basis of their experience on boiler. At a time 15 participants were selected. The remaining were asked to join the next batch. Some of the trainees were deputed by mills, others came on their own.

4. The Vidyapeeth did not charge fees for the participants in the first and second batches. Each participant was charged Rs. 40/- for the courses conducted subsequently.

5. The Vidyapeeth has conducted 8 training programmes for the workers. There was a continuing demand for this course.

6. The Vidyapeeth had no difficulty in selecting an experienced visiting teacher who conducted classes in seven batches. The staff had difficulty in conducting the eighth course since the duration of the course had to be extended by four months due to strikes.

7. The training programme is supervised by the staff of the Vidyapeeth.

8. The participants in the course told that they are happy with the way the training is conducted. They have gained some knowledge. They hoped to get through the examination and in due course they might get promotion. In case they do not get promotion in their own factory, they hope to get jobs in other factories.

9. The participants in the 8th batch knew very little about the activities of the Vidyapeeth.

10. On the whole, the course for boiler attendants is one of the most efficiently conducted courses. The training programmes have contributed to the vertical and horizontal mobility of the workers. Many participants have passed the government examination. Some have been promoted and some were expecting promotions in due course of time.

Case 2

Course in Metrology and Quality Control

Batch No.		**I**	**II**	**III**	**IV**
Date of commencement	:	9.3.71	30.8.71	25.9.72	14.12.72
Date of Conclusion	:	10.7.71	30.3.71	3.4.73	23.7.73
Duration	:		4—4½ months		

Weekly sessions	:	2—3			
Instructional hours	:	100			
Place where conducted	:	Victoria Jubilee Technical Institute, Matunga, Bombay-19			
Medium of Instruction	:	English			
Timings	:	6.30 p.m. to 8.00 p.m. for Theory 6.30 p.m. to 8.30 p.m. for Practicals			
No. of participants	:				
Enrolled	:	15	17	17	17
Completed	:	8	15	17	17

Name of the lecturers :

1. Prof V. C. Narawane, J. J. T. I. Bombay-19
2. Shri J. M. Kasturi
3. Prof. N. K. Kulkarni
4. Prof. T. Francis
5. Shri M. S. Mantri, Quality Control Deptt. Mahindra & Mahindra
6. Shri S Madhavan " " "
7. Shri D. M. Johanputra, Metrology Section, Mahindra & Mahindra

Collaborating Agency V. J. T. I. Matunga, Bombay-19

Nature of Collaboration	:	Well furnished class room & Laboratory
Financial Aspect	:	Approximate expenditure per course came to Rs. 2100 (Rs. 1800 as honoraria & Rs. 300 for stationery etc.) out of which Rs. 1700 was reimbursed by way of fees paid by the participants (Each paid Rs. 100).

Asses sment :

1. In the course of discussion with the members of the faculty of V.J.T.I., the staff of the Vidyapeeth came to know that engineering industries in Bombay engage the unskilled labour in the Inspection departments where skilled workers are needed for some jobs and there is no agency which could train the workers to handle the sophisticated instruments. Consequently the Vidyapeeth organised the courses in Metrology and Quality Control. These courses were conducted to improve the technical skill of the workers, to make them familiar with modern metrological instruments and also to make them quality conscious.

2. The syllabus was prepared with the help of lecturers in the industrial engineering department of the V.J.T.I. and in consultation with the Chief Inspectors of certain engineering industries. Cyclostyled note were prepared and arrangements for practical work were made in the V.J.T.I.

3. Circular letters and pamphlets were sent to industries requesting them to depute the workers for the course. Trainees were selected on the basis of their experience in the inspection department. The selected candidate had varied educational background. Some had passed S.S.C. and others were graduates in engineering. Therefore, the visiting lecturers had difficulty in teaching the subject on several occasion since the less educated trainees could not understand the technical subjects and at the same time the more educated ones were bored. This difficulty was overcome in subsequent batches which had more homogeneous and different workers' levels had been kept separately.

   The course in general was well received. Both the employers and the trainees have benefited. The staff should have persuaded the management of industries who deputed the candidates for the course to pay more for each cadidate by way of fees. This would have helped the Vidyapeeth to make the course financially self-sufficient.

5. Since the Vidyapeeth depends entirely on the cooperating agencies in such courses there is always delay in starting the course. Arranging visits to different industries is difficult. The industries having sophisticated instrument sometimes refuse permission. They fear that the instruments are likely to be damaged during demonstration. The visiting teachers may not always be willing to prepare notes.

6. In order to make the course more diversified and closer to the "polyvalent approach", the staff included mechanical topics like Citizenship training, Indian culture, Home and family life and other topics. The participants did not seem to have appreciateed the lectures on these topics. It is apparent that the staff had added some topics in the syllabus without exploring the needs of the target group.

Case 3

Course in Efficient Fuel & Steam Utilisation

Batch No.		I	II
Date of commencement	:	8.8.72	26.3.74
Date of conclusion	:	8.12.72	15.8.74
No. of participants Enrolled		14	22
Completed		14	6
Duration	:	4 months	
Weekly sessions	:	Three	
Instructional hours	:	Forty	
Place where conducted	:	Shramik Vidyapeeth, Worli, Bombay-25	
Medium of Instruction	:	English	
Timings	:	6.00 p.m. to 7.30 p.m.	
Names of Lecturers	:	Shri S. M. Navalkar, Lect. in Chem. Engg., Wadia Technical Institute, Bombay & The staff of the Shramik Vidyapeeth	
Collaborating Agency	:	Century Mills, Worli	
Nature of Collaboration	:	Physical facilities	

Financial Aspect	:	Total expenses Rs. 1100 (Rs. 1000 as honoraria and Rs. 100 for stationery etc.) The participants paid Rs. 40 each.

Assessment

1. In the course of discussions with lecturers in the technical institute, the staff of the Vidyapeeth leant that quite a good percentage of fuel is wasted in industries and mills due to lack of scientific knowledge of using it. This led them to plan courses for industrial workers to acquaint them with scientific aspects of efficient utilisation of fuel and steam in industries. The object of this course was to improve the technical skill with adequate knowledge of the subject, to expose the workers to the latest techniques ond developments in the field and also to make them conscious of the importance of the economic use of fuel and steam.

2. The staff prepared the syllabus in consultation with a visiting teacher and sent circulars and pamphlets to different industrial establishments. In all 14 persons responded and all were admitted for the first course.

3. When the Vidyapeeth gave publicity for the second course, the response was encouraging. Energy crisis experienced during this period was another factor for the encouraging response.

4. Discussions with the participants revealed that the course was well planned and well organised. They acquired new knowledge which they would like to utilise in saving fuel. The visiting teacher was of the opinion that the training given to the workers would help them to save 2-3 per cent of the fuel, if the workers cared to employ techniques. He further added that if training is given to the supervisory level, the industry can save 5-6 per cent of the fuel.

5. There is considerable demand for such courses. Due to the present energy crisis many industries want to train their workers in order to avoid wastage of fuel. The Vidyapeeth may explore the possibilities of organising such courses for pharmaceutical, steel and petro-chemical industries. It is advisably to contact the oil-companies and get their support.

Case 4

Course in Tailoring for Unemployed Young men

Date of Commencemet	: 8.7.74
Date of Conclusion	: 8.8.74
Duration	: Three weeks
Weekly sessions	; Five
Instructional hours	: Twenty
Place where conducted	: Samaj Shikshan Mandir, Worli Bombay-25.
Medium of instruction	: Marathi
Timings	: 9.00 a.m. to 10.00 a.m.
No. of participants	:
Enrolled—	10
Completed—	9
Names of the lecturers	: Mrs. Swati S. Patankar, Trained Teacher & Staff of the Shramik Vidyapeeth
Collaborating Agency	: Bombay City Social Education Committee
Nature of Collaboration	: Use of Sewing Machines and Hall
Financial Aspects	: Approx. Rs. 300 for the course, out of which Rs. 200 paid as honorarium to lecturer and Rs. 100 for maintenance and repairs of machines. Participants paid Rs. 12 each for cloth and machine accessories like bobin case, needles and thread.

Assessment :

1. The manager of a readymade garment manufacturing firm was interested in employing some youngmen who could stitch shirts. He approached the Vidyapeeth's staff and held discussions with them. In consultation with the manager of the firm, the staff prepared the syllabus and organised a short term course in elementary skill of stitching shirts.

2. Publicity for this course was done through circulars in selected residential areas. As a result 22 unemployed youths approached the Vidyapeeth.

Ten candidates were selected for the course, while selecting the candidates the staff made it clear to them that there is no guarantee of a job and the Vidyapeeth can give occupational training in tailoring.

3. The course was conducted regularly. The staff supervised the course.

4. Discussions with the participants revealed that they were satisfied with the way the training was given to them. Some believed that their chance of getting jobs have become brighter.

5. The staff had certain difficulties in organising this training programme. The Vidyapeeth did not have sewing machines and then the machines had to be obtained from BCSEC. Very often the machines went out of order The staff could not repair or replace them in time. They had no control over the participants. Some trainees used to remain absent.

6. Such courses need intensive follow up work. The staff has to make effort to secure some job for each trainee. If this is not done the unemployed youths are further frustrated. Even after placement, continuous supervision is necessary to ensure that the beneficiaries attend to their duties regularly and do their bit to increase their productivity. The members of the staff of the Vidyapeeth are making efforts in that direction.

7. In sum, the Vidyapeeth has made sincere efforts to provide some occupational training for unemployed youths. But regarding the methods used, the teaching was mainly in the form of advice which the trainees did not quite appreciate. The course would be more helpful, if the young people could get more sense of self-confidence, as well as capacity for mobility and initiative, particularly through some informations about job opportunities, contacts to be made, employment problems, the way they should approach the prespective employers and so on.

Case 5

Course for Prospective Weavers of Swadeshi Mills, Kurla

Batch No.	I	II
Date of commencement	: 26.3.74	27.3.74
Date of conclusion	: 29.6.74	28.6.74
Duration	: 3 months	
Weekly sessions	: six	

Instructional hours	: 200
Place where conducted	: Swadeshi Mills, Kurla, Bombay-70.
Medium of Instrution	: Marathi
Timings	: 8.00 a.m. to 3. p.m. Batch I 3.00 p.m. to 9.00 p.m. Batch II
No. of participants	
Enrolled—	10
Completed—	10
Names of Lecturers	: I. Prof. M.H. Bhavsar; Textile Deptt. V.J.T.I., Bombay 2. Shri Navalkar, Head Weaver, V.J.T.I. 3. Shri Bhagwat, Supervisor from Swadeshi Mills. General Education Staff of the Shramik Vidyapeeth
Collaborating Agency	: Swadeshi Mills, Kurla, Bombay-70.
Nature of collaboration	: well equipped training hall, looms for practicals.
Financial aspect	: Rs. 3400 (Rs. 1700 for each batch) Expenses were reimbursed (Rs. 1200 honoraria to lecturers per batch).

Assessment:

1. This course was conducted for a textile mill. The Vidyapeeth had already run a course for drawers for this mill earlier. Being convinced that the Vidyapeeth could run useful courses the management approached the Vidyapeeth to organise more courses in the premises of their mill for the workers and relatives. As a result the staff organised the prospective weavers' course.

2. The syllabus for the course was planned in consultation with the management and a lecture in the textile department of a technical institute.

3. The trainees were the sons and relatives of the workers of the mill. They were in the age-group of 16-20 and had some formal education. Some had studied upto S.S.C. They were selected by the management on the basis of their physical fitness.

4. The management gave all help to run the course. They provided physical facilities for lectures, made their looms available for practical training and appointed their staff to supervise the training. The expenses were met by the enterprise.

5. Discussions with the trainees revealed that they were satisfied with the way the training was given. They got training free of charge and they have been assured of jobs of weavers with the starting salary of Rs. 350 per month. The production manager expressed his satisfaction with the way the Vidyapeeth organised the course. The management could employ 20 trained young men. Training of these workers was comparatively cheaper. In fact the management wants the Vidyapeeth to organise many more courses for their workers.

6. The visiting teacher was of the opinion that by the time the training is complete an average participant could show 80 per cent efficiency of an average worker, but within 3 months of actual service, these boys can show 100 per cent efficiency. They pick-up the work faster and their on-the-job training period is reduced considerably.

7. The trainer would like to be associated with the training programmes of the Vidyapeeth. He belives that apart from the monetary benefits he derives from his services to the Vidyapeeth, he gets an opportunity to understand the practical problems in the field of textile. Such a knowledge helps him in his professional career.

8. The Vidyapeeth has organised these courses successfully. The employer, the workers, the trainees and the visiting teacher have found this course useful. All have been benefited in some way. The Vidyapeeth has succeeded in utilising the existing resources of the community to organise such courses. If the staff want to organise more courses of this type they need to make more efforts to integrate general education component with the technical component of the syllabii. The general education should also help to solve the urgent needs of the target group.

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